DOCUMENT RESUME

ED 133 041 PS 008 897

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TITLE	Ecological Monitoring Information System (EMIS).
INSTITUTION	Appalachian Regional Commission, Washington, D.C.; Pennsylvania State Governor's Office, Harrisburg.
PUB DATE	75
NOTE	303p.; Not available in hard copy due to print quality of original
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	Child Care; *Child Development; Cognitive Development; Comprehensive Programs; Cost Effectiveness; Data Processing; *Day Care Programs; Ecological Factors; Educational Accountability; Educational Administration; *Educational Policy; Evaluation Methods; Flow Charts; *Government Role; Graphs; Interaction Process Analysis; *Management Information Systems; Measurement Techniques; *Program Evaluation; Records (Forms); State Agencies; Student Teacher Relationship
IDENTIFIERS	*Ecological Monitoring Information System; Pennsylvania

ABSTRACT

A system for evaluating and monitoring child development projects, with possible computerization capabilities, was developed for the State of Pennsylvania in connection with 26 child development projects funded by the Appalachian Regional Commission. The Ecological Monitoring Information System (EMIS), provides a series of ecological measurement tools and a baseline of data to conduct naturalistic child development studies in a highly controlled condition. Based on five years of research on the ecology of child development, it is concerned with group theory and with interactions of children in day care. Data compiled and standardized covered: (1) evaluation aspects, (2) medical components, (3) staff, parent and community background, (4) outreach, (5) public relations, (6) program administration and (7) social service components. Issues addressed include: the development of an effective measurement tool for Piaget's theory of cognitive development; adult-child interactions; cost analysis; peer group development; information and referral programs. The EMIS might be used on a regional, state or national level to collect data in making decisions about child care. The system has the capability of adoption to group day care, family day care, information and referral programs and others. Included in the document are flow sheets, sample letters, tables, graphs, and data sheets. (BF)

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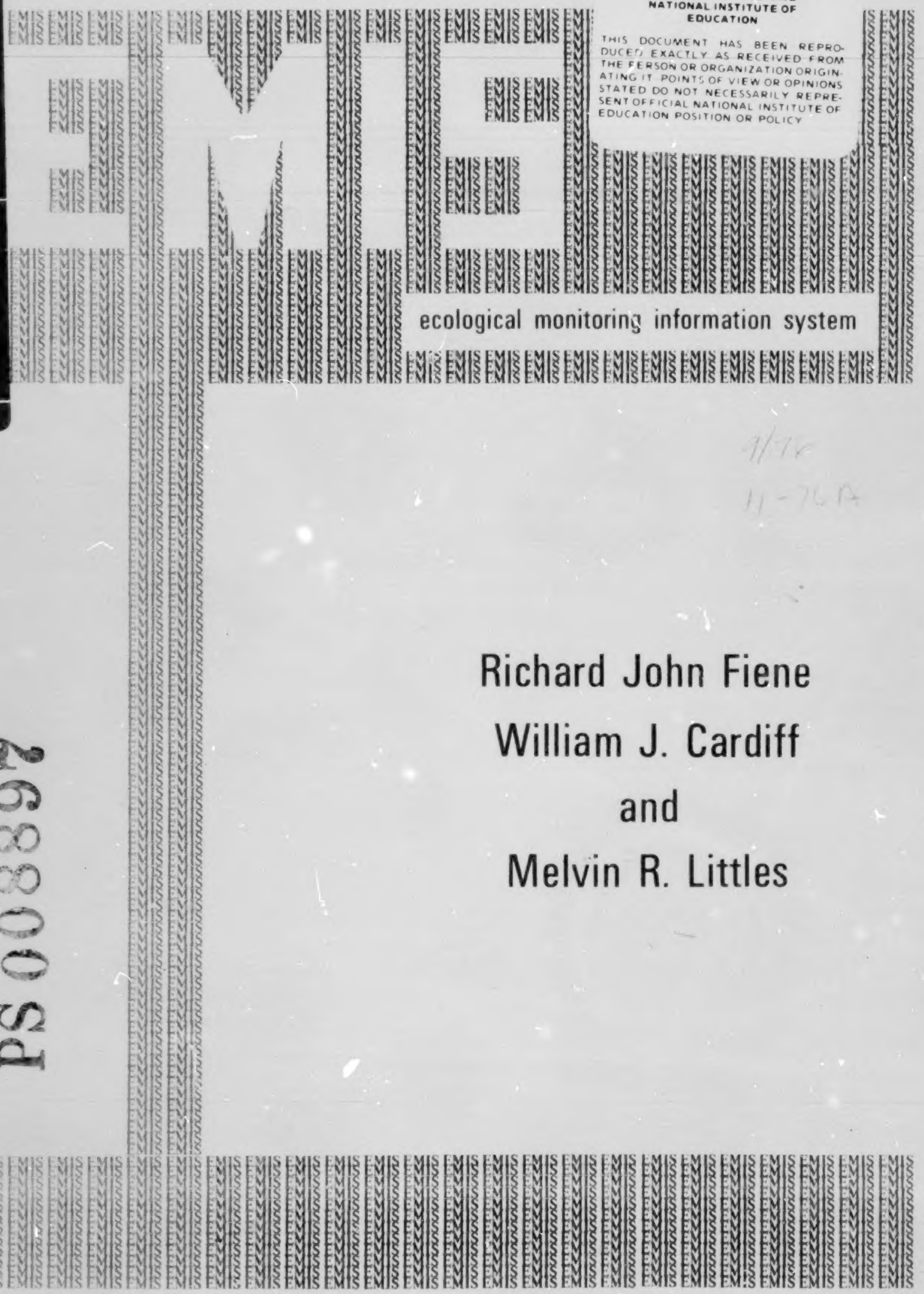

ecological monitoring information system

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William J. Cardiff
and
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PS 008897

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ECOLOGICAL MONITORING INFORMATION SYSTEM (EMIS)

Richard John Fiene, William J. Cardiff, and Melvin R. Littles
Governor's Office for Human Resources
Commonwealth of Pennsylvania

PS008897

Appalachian Regional Commission
Washington, D.C.
1975

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ECOLOGICAL MONITORING INFORMATION SYSTEM

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Preface

The reason for developing EMIS is simple. The child development field, and other related social service delivery systems have made great strides forward, but in many cases in ignorance of related areas. EMIS is a tool, a comprehensive tool to analyze all avenues involved in a social service delivery system. In order to analyze a system totally, I propose that an ecological approach must be implemented to analyze all patterns of interaction. EMIS is based on five years of ecological research; it is concerned with the theory of the group, the theory of interactions of children in day care. We are concerned theoretically with the temporal and spatial characteristics of interactional patterns in groups. We are concerned with information processing in groups, in analyzing interactional patterns both verbally, socially and motorically. EMIS hopefully will make a contribution in the fields of child development theory, evaluation research and cybernetics.

This is the first I feel of many revisions of this system. This first edition is rather pragmatically oriented, with further revisions becoming more and more theoretical.

Please excuse the form in which this book is being presented. I realize that at times it becomes rather cumbersome, but this was necessary because of printing costs. We tried to produce it as cheaply as possible so that it would be readily available to all who wanted a copy. The cost of this publication only covers it's printing cost and all revenues are re-circulated to print more copies.

Richard J. Fiene
William J. Cardiff
Melvin R. Littles
12/25/75

Acknowledgements

After five years of research and three moves, which involved moving from University positions to finally a position in government, this book is the outcome of these travels. Obviously, in doing all of this, many people were involved and I'd like to take this time to thank some of them: Aaron Carton and Herb Kaye from S.U.N.Y. at Stony Brook; Gary Lange and Ken Asher from University of North Carolina at Greensboro; and, Patricia Campbell from the Governor's Office for Human Resources and especially Karen Kroh who so ably helped me tie all of this together at the very end.

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CHAPTER 1

Upon reviewing all the relevant research literature in child development/child care, and the use of evaluation systems (computerized or non-computerized) in social policy decisions, we found a definite lack of sound research in the above and more critically in how it relates to the ecology of the child. There has been some research into Management Information Systems at a survey level (Schriber and Cohen, 1973) but even these researchers point their finger at the paucity of findings in this area. Since that time the hiatus has continued. Along with this fact has been the difficulty in establishing viable measures of a child's ecological system (home, community, school, etc.) although presently through Project Right Start (Taylor and Milliones, 1975), effective measures are beginning to be obtained.

The scope or mission of this E.M.I.S. is to fill this gap that has existed in the field of child development. This article will be an introduction to what we have developed which we feel can be used as a tool to making sensible social policy decisions based on all the facts, and not mere intuitions; and it will provide us with a series of ecological measurement tools and a baseline of data to conduct naturalistic studies in child development in a highly controlled condition. This system in its present form can be computerized and we feel confident that such a system could be used either on a regional, state or national level to collect meaningful data in making decisions about child care/ child development arrangements. The system has the capability of adoption to group day care centers, family day care homes, information and referral programs, maternal/child health programs and, with certain minor revisions, to a host of other similar child development programs.

The unique aspect of the system is the fact that it is not viewed as an end in itself (too many evaluation systems are looked upon in this regard), but rather as a means to an end. The field of child development has so much data from so many sources that it staggers the imagination of assembling it in any meaningful fashion. It has to be put together, however, if we are going to decide where we've been and where we need to go. That is the purpose of this system, to help us decide what has been done in child development in the State of Pennsylvania, what are the critical issues and questions in child development and how are we going to get answers. Usually evaluation systems answer the first two segments above, but do not address themselves totally to the last segment. The EMIS will address itself totally to this last segment.

Some of the issues this system will address will be as follows:

to develop an effective measurement tool for Piaget's theory of cognitive development; adult-child, child-child, and adult-adult interactions will be looked at more closely; a theoretical and actual cost analysis coefficient based on a price tag, number of children involved and their developmental increments will be developed; the peer group as a strategy for early intervention; evolution of the peer group in the first five years of life; information and referral programs alone as versus I & R in day care settings--which is more cost effective--these and other ecological measures will be used and decisions will be made based upon these hard core data.

HISTORICAL PERSPECTIVE

The Evaluation and Monitoring project is the housing agent for the EMIS, which is being funded through Appalachian Regional Commission dollars (202-D) in the State of Pennsylvania. The task of the project is to monitor, evaluate and, where needed, provide technical assistance to 26 projects located in approximately 70 sites. The ARC Code states that funds are to be used for demonstration programs which are engaged in innovative approaches in child development. The ARC region was to become a national laboratory where new experimental approaches to child development could be tested. From a position paper (ARC, 1975) it is rather evident that this goal has been reached and surpassed in many areas. As of this writing, some states within the ARC region are beginning to put together some forms of evaluation systems. The authors have been called in to do some consulting regarding the EMIS (Nashville, Tenn., 1975). However, as of this date a system capable of providing data to assist in making social policy decisions does not exist. Enter the EMIS.

THE BEGINNING

The task before us was to pull things together for the State of Pennsylvania regarding child development programs funded by the Appalachian Regional Commission. Our concern was for quality care by making programs accountable for services provided. With the initiation of the EMIS there were some real demonstrable programs, but these programs were few and far in-between. We therefore set our sights on improving care for children across all our projects. Custodial care wasn't good enough for the children. Now don't take me wrong, the fault did not lie totally with the programs themselves. I would have to say that many of the problems that were identified should have been rec tified at the state level. However, before the advent of the EMIS there was no way of detecting problems quickly and at an early stage either at the state, regional or local level.

The first step in any evaluation system is to get out into the field, and this is exactly what we did to ascertain what exactly was going on. Five months worth of travel ing to see all of our programs, all of their components, providing technical assistance where necessary, patting on the back and slapping of fingers where needed, even some defunding where things had gotten out of hand. Our baseline was established with this initial set of visits. They were called Site Review Team (SRT) visits. Obviously, they were problem probing visits, finding where programs had gone astray, where they needed help and where they should be going and wanted to go and how could we, at the state level, help them get there.

One problem that appeared in 20 of the 26 projects was the difficulty of compiling data in a meaningful fashion. When one is trying to computerize any type of system, it is necessary to standardize data. As the data existed in its disarray, it would have been totally impossible to plug the projects into the EMIS. Therefore, we played the role of systems analyst and worked with the project on standardizing their data. What is critical here in helping them put their data together was the fact that in collecting the information it be useful to us at the state level, but it also be useful to the individual projects. We did not want them collecting meaningless statistics for us. It should be said at this point that our form of evaluation was useful not only to us but at all times we included the projects in it so that they could be evaluating their own progress. In other words, we are engaging in formative as well as summative evaluation. Whatever forms we developed with them, these forms would help the project to evaluate their own program as we monitored the program from the state level.

The time that we did spend in the office in the first five months was concerned with the types of data sent to us in the form of reports, summaries and proposals. Some of the materials received were of a rather lengthy nature, between 200-300 pages for continuation proposals. Again for the sake of clarity, we decided on a means for standardizing all incoming data. We developed a hypothetical proposal and budget, standardized statistical data sheets, standardized monthly reports. Now all proposals would follow a similar format within a 15 page limit. This helped not only us at the state level in getting proposals through the governmental maze, but also made it easier for project directors in writing their continuations. We are now in the process of developing an initial hypothetical grant proposal which again should make it easier for project directors in writing proposals for ARC funding. An analogy would be along the lines of writing an open-ended essay on a topic as versus a multiple choice and fill-in type test. Obviously in the latter the instructor has greater control and there is less ambiguity in responding to questions.

Another form of standardization was through the use of child development profiles. We found that many projects were all over the ballpark when it came to identifying critical areas of a child's development. Therefore, we helped projects get-it-together in this area. Some projects were using their own home-made forms (some were rather sophisticated), others used standardized child development profiles and still others were collecting IQ scores.

Another avenue is being pursued by the senior author in trying to develop an ecological based profile with some projects who requested help in this area. An attempt will be made to look at its efficacy in regards to child development by running univariate and multi-variate analysis with more standardized measurement instruments.

PRESENT STATUS

It is hoped that with the above baseline data, which is now coming into our office, that appropriate ecological based studies will be developed by and through the Governor's Office to evaluate various domains within child development. As I alluded to earlier, certain questions would be answered through the use of EMIS. Other questions also of national importance regarding early childhood education will be answered.

Some very important questions raised by Fein and Clarke-Stewart in their book Day Care in Context will be answered, such as:

(1) How do day care programs differ from one another with respect to intention and implementation (Group, Family, In-Home, etc.)?

(2) How do these differences influence communities, families and children?

(3) How can the relations between "inputs" and "outputs" be interpreted?

(4) What should children be doing and experiencing; that is, what is the relation between what happens to children and their

(5) How can these desired activities or experiences be promoted in a day care setting?

(6) To what extent do programs provide them and how much do the outcomes conform to our expectations?

By no means will we be able to answer all of the above thoroughly, but hopefully we will be able to begin to answer parts of the above questions.

Presently we are engaged in a good deal of data analysis in trying to put together everything that our projects have been so kind to send us.

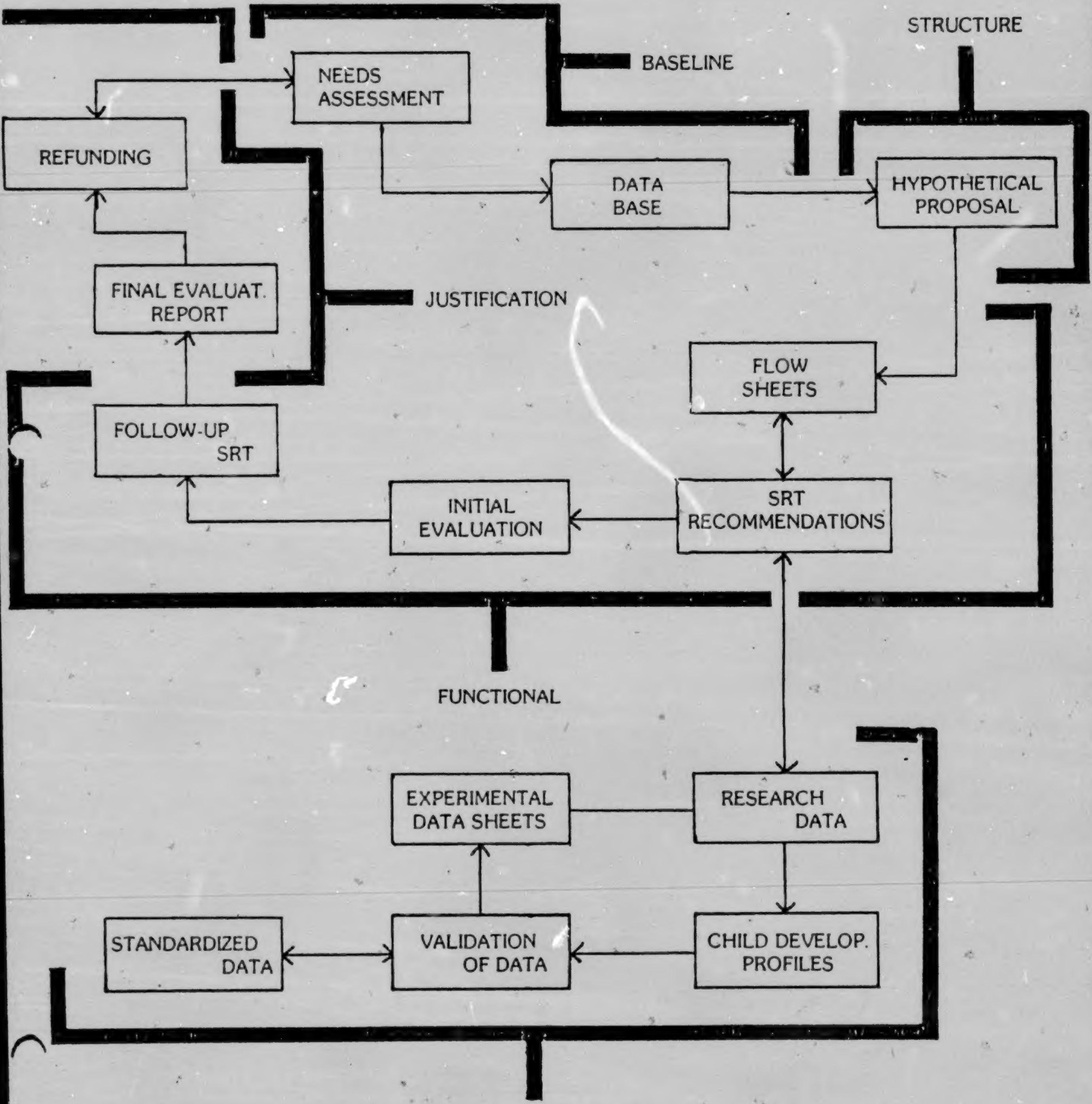
THE FUTURE

Again we can only hope because as too often happens in the human resources field, many ideas get shot down. So we go on hoping that we will be able to influence social servants, political leaders with the hard facts. I feel confident that we can. This is a first attempt at a rather grand plan, but even if we are only recognized and believed in by 10% of all government, it is a first step. Because up until this point we have been relying too heavily on gut-level feelings and not on hard core data. One cannot sell county commissioners, the feds or state government on gut-level feelings. You must show how many people have been employed because of your program who would be on welfare if they did not have the program to place their child. As Bettye Caldwell (1970) has stated, money is tight and for the next few years, which appears to be turning into a decade, we are going to have to be accountable for every cent we spend.

The EMIS is a tool to do just that. It is capable of putting it all together, the whole picture for our political leaders. Facts and figures don't lie and once they have the total picture in front of them, we'll all know what will work and what will not work in child development. This article is only an introduction, we are in the process of putting together the system in monograph form in its totality, and once it is available, I think everyone will see its utility for adoption by other states and regions.

Flow Sheet—overview of E.M.I.S. This is a basic schematic for evaluating and monitoring child development projects with possible computerization capabilities.

ECOLOGICAL MONITORING INFORMATION SYSTEM


STRUCTURE
BASELINE
NEEDS ASSESSMENT
REFUNDING
DATA BASE
HYPOTHETICAL PROPOSAL
FINAL EVALUAT. REPORT
JUSTIFICATION
FLOW SHEETS
FOLLOW-UP SRT
INITIAL EVALUATION
SRT RECOMMENDATIONS
FUNCTIONAL
EXPERIMENTAL DATA SHEETS
RESEARCH DATA
STANDARDIZED DATA
VALIDATION OF DATA
CHILD DEVELOP. PROFILES

COLLECTION

This section is totally concerned with our communication at the state level with other states explaining EMIS. Some of the materials appear later on in the manual; I included them here as an introduction for those of you who would like to get a brief overview without reading the whole manual.

A further explanation will be found later in the text. For a brief explanation of the forms in this introduction, read the following letter which accompanied all forms sent to other state agencies.

COMMONWEALTH OF PENNSYLVANIA
GOVERNOR'S OFFICE
OFFICE FOR HUMAN RESOURCES
500 STATE STREET BLDG.
N.W. CORNER THIRD & STATE STREETS
HARRISBURG, PA. 17101

Dear

This is in response to a letter from who asked us to send you some information regarding the development of our system.

Enclosed you will find the following items:

(1) Overall flow sheet
(2) Hypothetical proposal
(3) Sample back-up data letters
(4) Flow sheets
(5) Overall System
(6) Graph of:
    A. SRT visitations
    B. Unit cost analysis

Before I begin explaining the above, let me also say that we are in the process of developing an overall research strategy which will be in the form of unified naturalistic studies across all day care programs employing a two-between and one-within mixed analysis of variance. This is presently being formulated by . All of the above will be computerized on a Data Text or SPSS system. Also, let me premise all of the above with the fact that we provide technical assistance as well as evaluating and monitoring ARC programs. This fact will help to clarify how many of the forms are used.

(1) Overall flow sheet - this is an overview to the system that we are attempting to develop. We identify the need through the project and then have the project develop a data base. This is done with our flow sheets that develops on our SRT's. These flow sheets help the projects to collect data and obtain meaningful statistics both at a group and individual level. The hypothetical proposal is a standardized form to be used by all projects when applying for refunding. All data will be incorporated within this hypothetical proposal. Once this is done, an SRT will occur and recommendations are made both

verbally and in writing to the particular program. These are followed up by back-up letters to obtain other pertinent data. Then a follow-up SRT is done to see how well the initial SRT recommendations have been satisfied. Upon completion of this SRT, a final evaluation will be done determining eligibility for refunding.

(2) Hypothetical Proposal - in developing any computerized or research design, it is necessary to standardize the incoming data in some meaningful manner. This was our first step. We created statistical forms that would unify the data so that it can easily be compared.

(3) Sample back-up data letters - after completing an SRT, many times other data are found to be of interest. When this occurs, a back-up letter is in order so that we can obtain this other pertinent data.

(4) Flow sheets - this is a very individual process that can only be completed while on the SRT visit. This is tailored to the needs of the particular project being evaluated. Again, these forms are utilized in order to cut down on variation across projects so that at the State level we can standardize the data without losing the individual nature of the statistics. This latter fact is of the utmost importance to the projects, they are dealing with the individuals. We at the State level do not want the projects to compile meaningless statistics for us. The stats must be meaningful to us in Harrisburg and also meaningful to the individual projects.

(5) Overall system - this is the overall schematic that ties the whole system together. This is where all data plugs into. All of our projects plug into this system. This system has the capability of being computerized. Now, one can see why the hypothetical proposal and the flow sheets had to be developed. The analysis of this system will be broken up into the following analyses: multi-variate strategy will be employed where there are configurational changes in the data base. When these configurational changes are significant, a linear discriminant functional analysis will be used. Depending on these results, either a mixed or hierarchial analysis of variance will be used to look at specific variables which have been selected in advance.

(6) Graphs - SRT's - straightforward frequency count across months.

Unit cost analysis is an effective measure that can be used to gain an overview of which programs are extremely expensive.

I hope that the above makes sense to you; keep in mind that this is just an overview and there are many offshoots from the overall system. If you have any questions regarding this system in the future, please do not hesitate to contact us at

.. Hope to hear from you soon.

Sincerely,

COMMONWEALTH OF PENNSYLVANIA
GOVERNOR'S OFFICE
OFFICE FOR HUMAN RESOURCES
500 STATE STREET BLDG.
N.W. CORNER THIRD & STATE STREETS
HARRISBURG, PA. 17[illegible]

Exhibit 2
Hypothetical Proposal

Dear

The purpose of this letter is to provide instructions for using the enclosed hypothetical proposal as a reference in filling out your own continuation proposal.

GENERAL INSTRUCTIONS FOR CONTINUATION PROPOSALS:

1. No revisions will be accepted to continuation grants in Harrisburg after the seventh (7th) month of continuous operation.

2. The continuation proposal is to be in the specific format outlined in the enclosed hypothetical proposal.

3. The statistical forms (pages 3,4,5,6,7,8,9.10) and the budget forms (pages i, ii,iii,iv,v,vi,vii,viii,ix,x) are to be filled in as they are. No revisions of these forms will be accepted.

4. Narratives are to be limited to: (for the past funding year)
goals and objectives satisfied
problems identified
solutions for problems

proposed goals and objectives for the upcoming year

All of the above are to be in quantitative terms.

5. No continuation proposal will be accepted if it is over fifteen (15) pages. This includes the narrative and budget sections.

6. Nine (9) copies plus the original are to be submitted to Harrisburg. Only two sets of the appendices need to be submitted.

7. The outside cover should be similar to the one used with the hypothetical proposal.

8. All new HEW forms and ARC forms are to be included in the continuation proposal. Please xerox the originals you have been provided with.

9. Any questions about the continuation proposals should be addressed to the appropriate project sponsor . We will be able to provide a three hour block of time for technical assistance for those who need help in writing their continuation. Please just call for an appointment.

SPECIFIC INSTRUCTIONS CONTAINED WITHIN THE HYPOTHETICAL PROPOSAL FOR YOUR CONTINUATION PROPOSAL

STATISTICAL FORMS:

1. On page 3, Educational or implementation component, fill it out accordingly and xerox. Make it part of your continuation proposal. The form is self-explanatory. Just fill in the blanks.

2. On page 4, if your daily schedule for the children will not fit here, please use the back of the form. Under define objectives of educational program in behavioral terms, the items written in are only examples, please supply your own objectives for the children enrolled in your program according to age categories. If you do not have enough room, please use the back of the form. Xerox this form and make it part of your continuation proposal. The other two items on this page are self-explanatory.

3. Page 5 is self-explanatory, just fill in the appropriate spaces. Xerox the upper portion of this page and include a sample menu. Under % of time engaged in the following daily activities please indicate the % of time for:

0-15 months ________
15-36 months ________
36+ months ________

e.g. if you have 15 toddlers, how much of their day (the total group) is taken up by outdoor play--10%, 20%, 30%. Please enter these data on the back of the form.

4. Pages 6, 7 and the upper portion of page 8 are all self-explanatory and just need to be filled in. Please xerox these forms and make them part of your continuation proposal.

5. On page 9, please note that the bottom portion of this page and page 10 apply to all projects and need to be filled out accordingly and xeroxed. Make this part of your continuation proposal also. If you have other services than the ones listed please put them on the back of page 10.

BUDGETARY FORMS:

When completing the enclosed budget forms, please refer to the instructions mai to you March 7, 1975. When preparing your proposal for submission please arrange yo budget forms in the following sequence:

1. ARC Form 3
2. Application for Federal Assistance - Part I
3. Project Approval Information - Part II
4. Budget Information - Part II & IV
5. Assurances - Part V
6. Budget Summary
   A. Itemized Budget

Note: ARC will only pay up to 80% of the total Equipment and Renovations costs. 20% of the cost must be paid with local cash.

Local Cash - All local cash must be properly documented.

Sincerely,

pc

[illegible]

APPLICATION FOR FEDERAL ASSISTANCE (NONCONSTRUCTION PROGRAMS) **PART I**	1. State Clearinghouse Identifier 2. Applicant's Application No.
3. Federal Grantor Agency Organizational Unit Administrative Office Street Address – P.O. Box City State Zip Code	4. Applicant Name Department Division Street Address – P.O. Box City County State Zip Code

5. Descriptive Name of the Project

6. Federal Catalog No.	7. Federal Funding Requested $

8. Grantee Type

______ State, ______ County, ______ City, ______ Other (Specify)

9. Type of Application or Request

______ New Grant, ______ Continuation, ______ Supplement, ______ Other Changes (Specify)

10. Type of Assistance

______ Grant, ______ Loan, ______ Other (Specify)

11. Population Directly Benefiting from the Project	13. Length of Project
12. Congressional District a. b.	14. Beginning Date 15. Date of Application

16. The applicant certifies that to the best of his knowledge and belief the data in this application are true and correct, and that he will comply with the attached assurances if he receives the grant.

Typed name	Title	Telephone Number		
		AREA CODE	NUMBER	EXT
Signature of Authorized Representative				

For Federal Use Only

HEW 608 T

OMB No. 80-R0185

PART II

PROJECT APPROVAL INFORMATION

Item 1.
Does this assistance request require State, local, regional, or other priority rating?
_____ Yes _____ No

Name of Governing Body _____
Priority Rating _____

Item 2.
Does this assistance request require State, or local advisory, educational or health clearances?
_____ Yes _____ No

Name of Agency or Board _____
(Attach Documentation)

Item 3.
Does this assistance request require clearinghouse review in accordance with OMB Circular A-95?
_____ Yes _____ No

(Attach Comments)

Item 4.
Does this assistance request require State, local, regional or other planning approval?
_____ Yes _____ No

Name of Approving Agency _____
Date _____

Item 5.
Is the proposed project covered by an approved comprehensive plan?
_____ Yes _____ No

Check one: State ☐
Local ☐
Regional ☐
Location of Plan _____

Item 6.
Will the assistance requested serve a Federal installation?
_____ Yes _____ No

Name of Federal Installation _____
Federal Population benefiting from Project _____

Item 7.
Will the assistance requested be on Federal land or installation?
_____ Yes _____ No

Name of Federal Installation _____
Location of Federal Land _____
Percent of Project _____

Item 8.
Will the assistance requested have an impact or effect on the environment?
_____ Yes _____ No

See instructions for additional information to be provided.

Item 9.
Will the assistance requested cause the displacement of individuals, families, businesses, or farms?
_____ Yes _____ No

Number of:
Individuals _____
Families _____
Businesses _____
Farms _____

Item 10.
Is there other related assistance on this project previous, pending, or anticipated?
_____ Yes _____ No

See instructions for additional information to be provided.

PART III – BUDGET INFORMATION

SECTION A – BUDGET SUMMARY

Grant Program, Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.		$	$	$	$	$
2.						
3.						
4.						
5. TOTALS		$	$	$	$	$

SECTION B – BUDGET CATEGORIES

6. Object Class Categories	– Grant Program, Function or Activity				Total (5)
	(1)	(2)	(3)	(4)	
a. Personnel	$	$	$	$	$
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges					
j. Indirect Charges					
k. TOTALS	$	$	$	$	$
7. Program Income	$	$	$	$	$

SECTION C – NON-FEDERAL RESOURCES

(a) Grant Program	(b) APPLICANT	(c) STATE	(d) OTHER SOURCES	(e) TOTALS
8.	$	$	$	$
9.				
10.				
11.				
12. TOTALS	$	$	$	$

SECTION D – FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$	$	$	$	$
14. NonFederal					
15. TOTAL	$	$	$	$	$

SECTION E – BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b) FIRST	(c) SECOND	(d) THIRD	(e) FOURTH
16.	$	$	$	$
17.				
18.				
19.				
20. TOTALS	$	$	$	$

SECTION F – OTHER BUDGET INFORMATION

(Attach additional Sheets If Necessary)

21. Direct Charges:

22. Indirect Charges:

23. Remarks:

PART IV PROGRAM NARRATIVE (Attach per instruction)

PART V

ASSURANCES

The Applicant hereby assures and certifies that he will comply with the regulations, policies, guidelines, and requirements including OMB Circulars Nos. A-87, A-95, and A-102, as they relate to the application, acceptance and use of Federal funds for this Federally assisted project. Also the Applicant assures and certifies with respect to the grant that:

1. It possesses legal authority to apply for the grant; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body, authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.
2. It will comply with Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and in accordance with Title VI of that Act, no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the applicant receives Federal financial assistance and will immediately take any measures necessary to effectuate this agreement.
3. It will comply with Title VI of the Civil Rights Act of 1964 (42 USC 2000d) prohibiting employment discrimination where (1) the primary purpose of a grant is to provide employment or (2) discriminatory employment practices will result in unequal treatment of persons who are or should be benefiting from the grant-aided activity.
4. It will comply with requirements of the provisions of the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced as a result of Federal and federally assisted programs.
5. It will comply with the provisions of the Hatch Act which limit the political activity of employees.
6. It will comply with the minimum wage and maximum hours provisions of the Federal Fair Labor Standards Act, as they apply to hospital and educational institution employees of State and local governments.
7. It will establish safeguards to prohibit employees from using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties.
8. It will give the grantor agency or the Comptroller General through any authorized representative the access to and the right to examine all records, books, papers, or documents related to the grant.
9. It will comply with all requirements imposed by the Federal grantor agency concerning special requirements of law, program requirements, and other administrative requirements approved in accordance with Office of Management and Budget Circular No. A-102.

____

Project Name

____

Number & Ages of Children Served

BUDGET SUMMARY

CATEGORIES	Local Share	ARC Share	Other Federal Share	Total Cost
I. Personnel & Fringe Benefits				
II. Travel				
III. Equipment				
IV. Consumable Supplies				
V. Consultant & Contract Services				
VI. Space				
VII. Other Costs				
III. DPW Administrative Cost (only when necessary)				
TOTAL COST				

COMPOSITION OF LOCAL SHARE

_______________________________ $ ____________

_______________________________ $ ____________

_______________________________ $ ____________

_______________________________ $ ____________

_______________________________ $ ____________

_______________________________ $ ____________

_______________________________ $ ____________

Total Amount of Local Share $ ____________

CATEGORY: I PERSONNEL	Annual Salary	Number of Months	% of Time	Local Share	ARC Share	Other Federal Share	Total Cost
Fringe Benefits							
Fringe Benefits (Rate) _______							
Category Total							

CATEGORY: II TRAVEL

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: III EQUIPMENT & FURNITURE

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: IV CONSUMABLE SUPPLIES

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: V CONSULTANT and CONTRACT SERVICES

Item or Nature of Service	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: VI [illegible]

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: VII OTHER COSTS

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: VIII DPW ADMINISTRATIVE COST

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

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HYPOTHETICAL PROPOSAL FOR COORDINATED COMPREHENSIVE DAY CARE, FAMILY DAY CARE HOMES, OUTREACH & FAMILY PLANNING PROGRAM

I. INTRODUCTION: NEED ASSESSMENT

This program has been in operation for 7½ months. The program was started i order to meet the growing demand for services not otherwise provided in this rural area. After completing a cross-sectional analysis of needs in the county, the following lack of services was noticed:

1. Many of the welfare recipients could not look for jobs due to the constraints of childrearing.
2. Many mothers in middle income families were interested in returning to wo but wanted more than a babysitting service for their children. They expressed a desire for preschool learning experiences.
3. Sample IQ testing was done on the preschoolers of welfare and middle inco families which showed a slower learning process of the welfare children when compared to the middle income families.
4. Families in both the welfare and middle income brackets expressed a desi for more information regarding other services in the area especially information concerning birth control and how to obtain birth control methods.
5. Mothers of infants and toddlers expressed a desire to return to work but wanted a family-type learning experience for their children.

Based upon these results, a program was established consisting of four main components:

1. A day care center for children 3-6 years of age.
2. Five family day care homes for children ages 3 months to 3 years of age.
3. An outreach information and referral service.
4. A family planning clinic.

II. GOALS AND OBJECTIVES FOR FIRST YEAR OPERATION

First year's goals and objectives for each component and how they have been or are being met. (Note: since one or two components of this program is a totall funded ARC project, only 4 goals and objectives for each component will be used as examples.)

A-1 DAY CARE CENTER. Since a planning grant had previously been awarded to assist in finding a location for the center, staff hiring and training to obtain licensing, the center was ready for operation by July 1, 1974. The goals and objectives, therefore, concerned the actual operation of the center.

1.) To recruit 20 IV-A eligible children and 10 fee paying children for the center. This was accomplished through advertising, utilization of the needs assessment information by our outreach workers and door to door ca vassing by the outreach workers. The center was filled by August 10, 1974. Some parents in the community expressed a dislike for group day care, consequently--

2.) Workshops concerning day care and what it's about were established once a week during July and August at different locations throughout the county. An attitudinal questionnaire was distributed before and after the workshop. Forty-five per cent of those parents who were against day care before the workshop changed their opinion after the learning experience.

3.) The testing of each child enrolled in the center to ascertain a developmental baseline to help in the establishment and/or adjustment of curricula. This was done through the use of the Denver Developmental. Base upon test results a curriculum was established having a developmentally eclec philosophy as its base. The theories used in establishing the curriculum were:

a) cognitive
b) response-environment
c) learning
d) behavior modification

4.) To assess the developmental progress of each child throughout his/ day care experience. This is accomplished by comparison testing of the behav ioral objectives designed for the children and actual learned responses.

A-2 FAMILY DAY CARE HOMES. Through the needs assessment, five areas throughout the county were considered as ideal locations for day care homes for infants and toddlers. The planning grant allowed for recruitment and training of the day care home mothers, thereby allowing the homes to begin operation on July 1, 1974. --

1.) To have four children enrolled in each home. As a result of the needs assessment, ten children were enrolled in the homes immediately upon the beginning of operation. The remaining ten children were finally enrolle after three months of recruitment by the outreach workers.

2.) Continuation of child development education for the day care home mothers. Four-hour workshops are held every other Saturday at the day care center. The topics covered are based upon the needs expressed through questionnaires or verbally by the day care home mothers. The workshops are mandatory; therefore, financial reimbursement for time spent was considered appropriate.

3.) A developmental evaluation of all infants and toddlers in order to establish their baseline motor and cognitive skills to assist in the development of training criteria for the day care home mothers. This was accomplish through the use of the Bayley Developmental and Cattell testing instruments. The results were correlated and corresponding learning areas incorporated int the workshops for the mothers.

4.) A daily interaction between the day care home mother and the parent discussing the behavior of the child that day and what the child has learned. Through weekly visits by the social worker with the day care home mothers and bi-weekly visits with the parents this frequency of interaction can be insure

(This section applies only to day care centers & homes)

1974

	Sex		Race			Center	Family	Total
Children served	M	F	B	W	O			
Infants 0-18								
Toddlers 18-36								
Preschoolers 36-60								
Primary 60 Plus								
Totals								

	Sex		Race				Para	
Staff Members	M	F	B	W	O	Prof.	Prof.	Total
Teachers								
Aides								
Ass'ts.								
Social Workers								
Totals								

What are your staff-child ratios for:

infants: ____________

toddlers: ____________

preschoolers: ________

Number of centers in your project:

Group: ____________

Family: ____________

1975 (Projected Figures)

Children to	Sex		Race					
be Served	M	F	B	W	O	Center	Family	Total
Infants 0-18								
Toddlers 18-36								
Preschoolers 36-60								
Primary 60 Plus								
Totals								

	Sex		Race				Para	
Staff Members	M	F	B	W	O	Prof.	Prof.	Total
Teachers								
Aides								
Ass'ts.								
Social Workers								
Totals								

What are your staff-child ratios for:

infants: __________

toddlers: __________

preschoolers: ________

Number of centers in your project:

Group: __________

Family: __________

1974	1975 (Projected Figures)
Number of classrooms/center: ______ ______ ______ ______ ______ ______ ______ ______	Number of classrooms/center: ______ ______ ______ ______ ______ ______ ______ ______
Please provide me with a daily schedule: 8-9 Arrival & free play 9-9:15 Snack 9:15-9:30 Group time 9:30-10:15 Structured play	Please provide me with a daily schedule:
Curriculum: Would you classify your program as: Piagetian: ______ Traditional: ______ Behavioral Analysis: ______ Montessori: ______ Other: ______ (please specify)	Curriculum: Would you classify your program as: Piagetian: ______ Traditional: ______ Behavioral Analysis: ______ Montessori: ______ Other: ______ (please specify)
Define objectives of educational program in behavioral terms: 0-18 mos: infant to be capable to feed self large muscle coordination - climbing up ladder 18-36 mos: know colors--red, blue, yellow toilet trained one nap/day eating at childsize table 36 mos plus: know numbers 1-10	Define objectives of educational program in behavioral terms: 0-18 mos: infant to be capable to feed self large muscle coordination - climbing up ladder stack four blocks on top of each other 18-36 mos: know colors--red, blue, yellow toilet trained finish 4 piece puzzle stack 8 blocks on top of each other 36 mos plus: know numbers 1-20 producing 6 word sentences

1974	1975 (Projected Figures)
Indicate the % of time engaged in the following/daily activities	Indicate the % of time engaged in the following/daily activities
Structural activities ______%	Structural activities ______%
Nap ________%	Nap ________%
Outdoor play __________%	Outdoor play _________%
Free play _________%	Free play __________%
Transitions _________%	Transitions _________%
Nutrition: Include sample menu:	Nutrition: Include sample menu:
Children served/day ________	Children served/day ________
Who does cooking: centralized kitchen _____ or not _______ teacher______	Who does cooking: centralized kitchen ______ or not______ teacher_______
Who does the serving child	Who does the serving child
What age are infants put on table foods __________	What age are infants put on table foods________

B. OUTREACH INFORMATION AND REFERRAL SERVICE. Again with the aid of the planning grant, the four outreach workers were recruited and trained prior to the July 1 start-up.

1.) To inform parents of existent services for themselves and their preschool child. Through the use of daily logs the total number of families visited and types of information sought can be discerned. In 7½ months operation, 1,042 families have been visited. The most frequently asked questions are:

- a) Can you tell me about family planning!
- b) How can I help my children get their immunizations?
- c) Which doctors take the medical card?

2.) To provide referral for preschool parents to the appropriate agencies needed by the family. Presently ten of the twelve preschool related agencies in the county are being used for referrals. The other two are of specific religious affiliations and none of the families visited fit their criteria for service usage.

3.) To coordinate referral of the various agencies, thereby eliminating duplication of effort. Through [illegible] between appropriate agency representatives, areas of [illegible] are explored and eliminated where possible. A survey [illegible] is presently being developed. This will be studied to find out where severe duplication exists and can be eliminated.

4.) To provide follow-up to cases that have been referred to ensur that service has been rendered. Of the 1,042 families visited, 571 hav been revisited at least once. Of those revisited 417 (or 73%) went to the agency referred.

(This section applies only to information & referral)

1974	1975 (Projected figures)
Caseload:	Caseload:
Total ________cases for all counties & caseworkers	Total ________cases for all counties & caseworkers
County ________ Caseworker ________	County ________ Caseworker ________
County ________ Caseworker ________	County ________ Caseworker ________
County ________ Caseworker ________	County ________ Caseworker ________
County ________ Caseworker ________	County ________ Caseworker ________
Home visits:	Home visits:
Total: ________	Total: ________
Per county: ________	Per county: ________
Per caseworker: ________	Per caseworker: ________
Per month: ________	Per month: ________
Children screened:	Children screened:
Total: ________	Total: ________
Per county: ________	Per county: ________
Per case worker: ________	Per caseworker: ________
Per month: ________	Per month: ________

1974	1975 (Projected Figures)
Children Re-screened: Total: ________	
Children detected as abnormal: Total: ________ Per county: ________	
Referrals: Total: ________ Medical: ________ Dental: ________ Pediatric: ________ Vision: ________ Speech: ________ Hearing: ________ Orthopedic: ________ Neurological ________ Psychological: ________ Public Health: ________ Day Nursery: ________	
Treatments: Total: ________ Medical: ________ Dental: ________ Pediatrician: ________ Vision: ________ Speech: ________	

1974	1975 (Projected figures)
Treatments: (cont.) Hearing: ____________ Orthopedic: ____________ Neurological: ____________ Psychological: ____________ Public Health: ____________ Day Nursery: ____________	
Follow-ups: ____________	

C. FAMILY PLANNING CLINIC. The needs assessment established a definite desire for this type of service. The planning grant enabled the director to locate a facility and recruit a physician, nurse and aide. Appropriate training was also given during this planning stage. Consequently, the program began operation July 1, 1974. There was and still is opposition from certain religious groups but it has not affected program operations.

1.) Increase access to family planning services for those people for whom these services were not available in the past. The establishment of the clinic plus the 250 referrals from the outreach workers has aided in accomplishing this goal.

2.) To establish a pregnancy and V.D. counseling component to aide individuals in family planning matters. The nurse has had six weeks inservice training regarding family planning techniques, V.D. and various psychological problems encountered with utilization of different birth control methods. With the assistance of the physician a counseling program has been established with 150 persons having taken advantage of its services.

3.) Community awareness of the services offered. This has been accomplished through weekly community service ads on radio and T.V. plus monthly articles in the local paper, monthly talks to local organizations and utilization of outreach workers.

4.) To provide family planning services to 500 people during the first year of operation. To date 300 individuals have been seen and used the clin facilities.

(This section applies only to family planning clinics)

1974

Caseload: Total: ____________

County: ____________

County: ____________

County: ____________

1975 (Projected figures)

Caseload: Total: ____________

County: ____________

County: ____________

County: ____________

Counseling: ____________

Referral: ____________

Medical: ____________

No. of clinics: ____________

Family Planning Educ.: ____________

V. D. Screening ____________

V. D. Treatment ____________

D. This section applies to all projects. Fill out accordingly.

1974

Psychological Services:

Who does it: Name: ____________

Degree: ____________

How often: ____________

What is the purpose ____________

1975

Who does it: Name: ____________

Degree: ____________

How often: ____________

What is the purpose ____________

1974	1975
Health Services:	
Who does it:	Who does it:
Name: ______________	Name: ______________
Degree: ______________	Degree: ______________
How often: ______________	How often: ______________
What is the purpose ______________	What is the purpose ______________
Dental Services:	
Who does it:	Who does it:
Name: ______________	Name: ______________
Degree: ______________	Degree: ______________
How often: ______________	How often: ______________
What is the purpose ______________	What is the purpose ______________
Speech and Hearing Services	
Who does it:	Who does it:
Name: ______________	Name: ______________
Degree: ______________	Degree: ______________
How often: ______________	How often: ______________
What is the purpose ______________	What is the purpose ______________
Other Services:	
Who does it:	
How often:	
What is the purpose:	

III. PROGRAM PROBLEM AREAS AND SOLUTIONS

Although the program has been accepted into the community, lack of financial community support is evident. A Consumer Advisory Council (CAC) has been formed to assist in policy making and fund raising. To date, their fund raising techniques have netted $2,015 or 1% of the program cost. Consequently other funding avenues are being explored e.g. the Neighborhood Assistance Act.

An internal and external continuous evaluation of the program has been established. The evaluation criteria and questionnaires which were submitted with the original proposal are still in use, although one of the goals for this year is to refine the evaluational instrument. According to the evaluational material, the program has shown positive strides in the areas of informational disbursement, referrals, coordination of services with various agencies, developmental progress of preschoolers, infants and toodlers, and increases in use of family planning services. It can also be seen that more work must be done in the areas of community impact, local share and inservice training.

In terms of program management, it should be noted that several positions (1 social service coordinator, 1 educational coordinator, and 1 family day care coordinator) have been eliminated on the new budget. This was due to the evaluation showing that these positions caused an overstaffing pattern. According to staff evaluations of administration, although there are minor areas of disagreemen with policy, overall they are comfortable with administrative decisions.

IV. CURRENT PROPOSAL GOALS & OBJECTIVES

The project for the coming year will:

A. Maintain 20 IV-A eligible and 10 fee paying children.

B. Continue testing each child.

C. Maintain the 20 children in the family day care homes.

D. Continue the 4 hour workshops every other Saturday.

E. Have the outreach workers visit 1700 families in 12 months.

F. Continue bi-weekly meetings between agency representatives.

G. Continue follow-up of all families visited.

H. Have the family planning clinic see 400 new clients in 12 months.

I. Provide counseling for at least 200 clients utilizing the family planning clinic.

J. Continue the weekly public service ads on radio and T.V. plus monthly articles in the local paper.

Those goals that have not been met will continue to be pursued. However, the evaluation has shown several areas for change: (Note: again, due to the size of this model program only two continuation goals will be used as examples.)

1. More emphasis on gaining community support must be given. This will be accomplished by:

A. During the first three months of the new project year thirty communit service ads will be shown over the local T.V. station.

B. At least two community organizations per month will be approached for a talk on this subject.

C. The C.A.C. will become more involved in community awareness through participation in the annual grange fair, fund raising drives and having at least one consumer accompany the director on each speaking engagement.

D. Over the new funding year, at least two informational articles per month will be placed in the local newspaper.

2. Means for project financial self-sufficiency must be explored and expanded This will be accomplished by:

A. The C.A.C. will have at least four fund raising drives this fiscal year with one of these being a big name group benefit show. This should attract people from the neighboring counties.

B. Utilization of the Neighborhood Assistance Act. A 501(c) (3) certificate was just obtained and a proposal for $75,000 is in the process of being written.

Industries contacted for contributions are:

1) Hedstrom - commitment of $5,000
2) Bethlehem Streel - commitment of $10,000
3) Leedon's Rug Mfg. - commitment of $2,000
4) Johnnie's Fish Cannery - commitment of $1,500.

Verbal contributions are presently being obtained from other sources Letters of commitment have been obtained on the above. A copy of all letters of commitment will be sent to you in two months or upon completion of the solicitation drive, whichever comes first.

State Act 54 will provide $12,000 for local match. Title XIX screenings will produce $10,200 fees for local share to be used this year. The EPSDT screenings have already been established for the year that will guarantee this figure.

V. CONCLUSION

As can be seen, the overall project has been partially accepted by the community and its component parts are in operation. It is hoped that through the evaluation process and the work of the C.A.C. that the project will continue to give quality service in a cost-effective manner. The continuation budget reflects this cost-effective approach. The second year funding by ARC for this program will help in its effort to provide quality services and to become self-sufficient by the end of year three.

ADDENDUM

The number 7 exhibit is a schematic of an experimental flow sheet developed by Mr. Fiene. He found that the child development profiles and standardized data that were collected in the field only answered some of the questions we have about children. What is needed is an ecological (naturalistic) evaluation tool to assess what the children are doing all day.

Through preliminary analysis it was found that children in our projects spend approximately 75% of their day engaged in a form of structured free play. Once this was ascertained, an evaluation tool was developed. This evaluation tool appears to be a very effective device when used in a day care setting for preschoolers (see Fiene, 1972). Some changes would be necessary if it were to be used with infants and toddlers.

Essentially it does the following: the teacher or the evaluator can obtain the amount of social interaction of one child with his peers and his teachers. Also, the amount of time actually engaged in particular activity areas and with particular toys (objects). It also gives us a measure for transitional times and the relationship of the amount of movement to language production and social interactions.

This evaluation tool is in the process of being standardized for preschool day care programs. Again, if there are any questions regarding this form or any of the other forms, please don't hesitate to call me at (717) 783-1921.

Exhibit 3

Back up Letters

Dear

This letter regards the compiling of summary statistics according to our conversation during the Site Review Team (SRT) Visit. I spoke with your Classroom Supervisor about compiling statistics from your "Child Development Evaluation" form. Only on those items circled, please supply me with total figures on these categories by age. Also, along with those figures, could you please supply me with the following total figures across all centers and homes:

Total Enrollment________	Family Day Care Homes____________
	Group Day Care Centers___________
Age Breakdown	0 - 15__________
	15 - 36__________
	36 + __________
Waiting List	0 - 15__________
	15 - 36__________
	36 + __________

Number of referrals made: ______To whom____________number__________

Where referrals were made:

To whom:______________________Numbers____________________

How many clients are engaged in treatment programs:

Numbers: ____________________ Agency: ________________________

In doing any evaluation of a project, it is always necessary to obtain some summary statistics. The above statistics are a critical component of our developing an overall system for the State ARC projects.

If you have any questions, please don't hesitate to call me at ~~(717) 783-1921.~~

Sincerely,

Exhibit 4

Flow Sheets

Dear

Enclosed please find the flow-sheet we talked about at our last meeting that I was going to develop for you. The form is developed according to the needs that I assessed during our SPT visit. Of course, the form itself may need revision once you try to apply it to your program. This is something that you can only assess. Please do not hesitate to call me if there are any problems.

Please note form for numbering:

1. Enter here the initial date that contact is made and the patient becomes part of the case load.

2. Child's age I = Infant (0 - 15), T = Toddler (16 - 36), P = Preschooler (37 +)

3. Small (p) indicates premature infant.

4. This (x) means a referral was made to a medical unit.

5. This (x) means treatment of this particular patient was begun.

6. This (x) means treatment of this particular patient has terminated.

7. Enter here the termination date when all referrals, visits and treatments are completed on this particular patient -- e.g. James Martin.

The other advantage of this form besides the fact that it records patients on an individual basis -- is the fact that group data can be obtained at any point by just adding down the columns. (See bottom of page.)

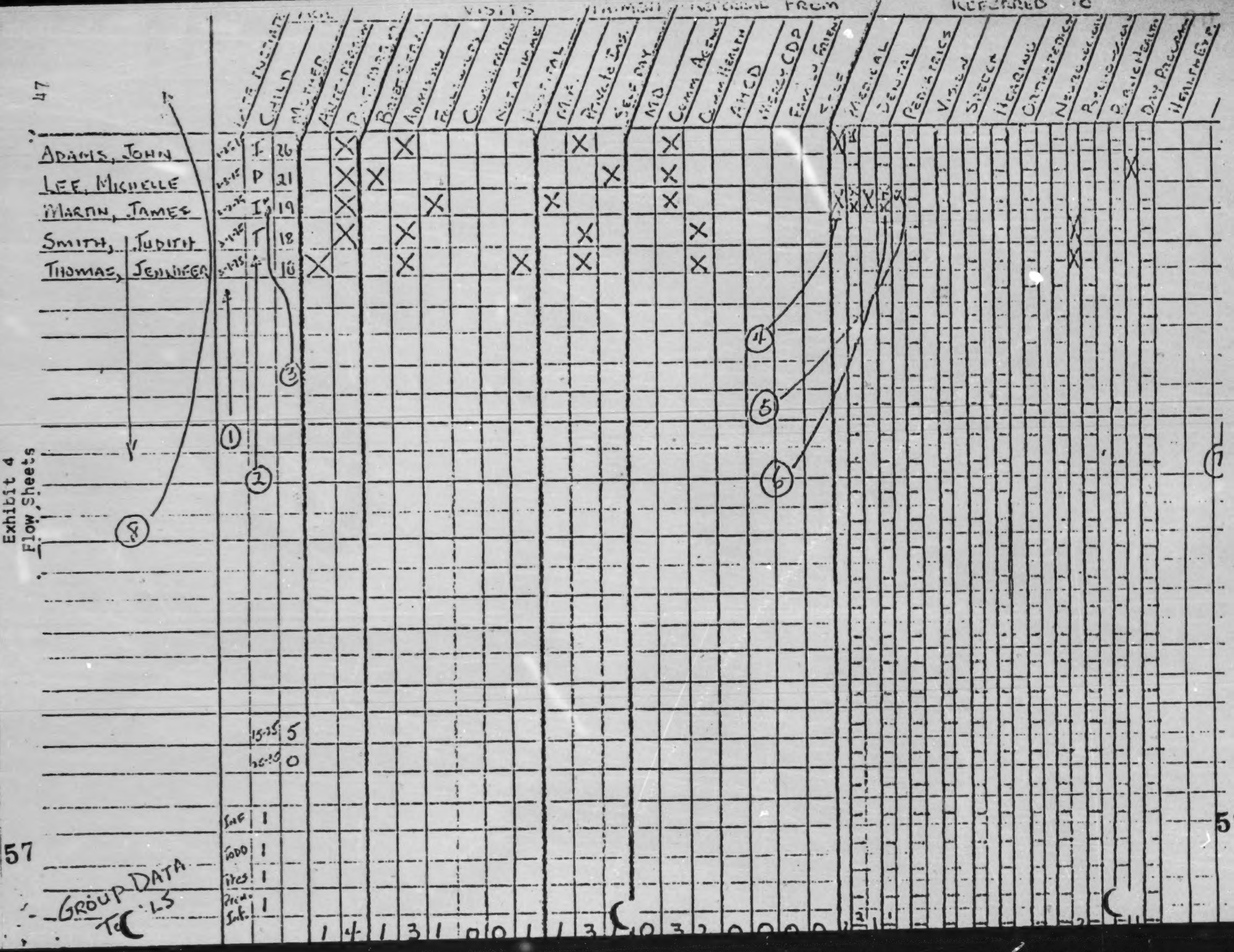
In making the quarterly reports to the advisory board, and to avoid any overlap of data across the quarters, color-code the data -- e.g. first quarter -- red; second quarter -- blue; third -- green; and fourth quarter -- orange. You want to make sure, you are not reporting the statistics more than once to the advisory board.

Again, if you encounter any problems please don't hesitate to contact me.

Sincerely,

47

Exhibit 4
Flow Sheets



	Date Initiated	Child	Mother	Ante-partum	Post-partum	Bright Start	Admission	Follow-up	Consultation	Not-at-home	Hospital	M.A.	Private Ins.	Self Pay	MD	Comm Agency	Comm Health	AHCD	Mercy CDP	Family & Friend	Self	Medical	Dental	Pediatrics	Vision	Speech	Hearing	Orthopedics	Neurological	Psychological	Mental Health	Day Program	Health Educ.
ADAMS, JOHN	1-5-75	I	26		X		X						X			X						X											
LEE, MICHELLE	1-8-75	P	21		X	X								X		X															X		
MARTIN, JAMES	2-7-75	I	19		X			X				X				X						X X	X X										
SMITH, JUDITH	3-1-75	T	18		X		X						X				X												X				
THOMAS, JENNIFER	3-1-75		16	X			X				X		X				X												X				
	15-25	5																															
	16-20	0																															
	Inf	1																															
	Todd	1																															
	Pres	1																															
	Prim. Inf.	1																															
GROUP DATA TOTALS				1	4	1	3	1	0	0	1	1	3	1	0	3	2	0	0	0	0	2	1						2		1		

57

5

Exhibit 4
Flow Sheets

HILDREN	DATE OF INITIAL CONTACT	HOME VISIT	REFUSALS	FLOW SHEETS	PROGRESS SUMMARIES	AFDC RECIPIENT	SCREENING	RE-SCREENING	ABNORMALITIES	REFERRAL REFUSAL	MEDICAL	DENTAL	PEDIATRICS	VISION	SPEECH	HEARING	ORTHOPEDICS	NEUROLOGICAL	PSYCHOLOGICAL	PUBLIC HEALTH	DAY PROGRAM	FOLLOW-UP	FINE MOTOR	WAITING LIST	TERMINATION	2ND RE-
SMITH, JOHN	1/23/75	X		X	X	X	X	X	X			X		X		X					X	X		X	4/24/75	
ONES, MARY	2/3/75	X	3/2/75																							
	2/6/75	X		X	X	X	X	X	X	X																

Exhibit 6b
Unit Cost

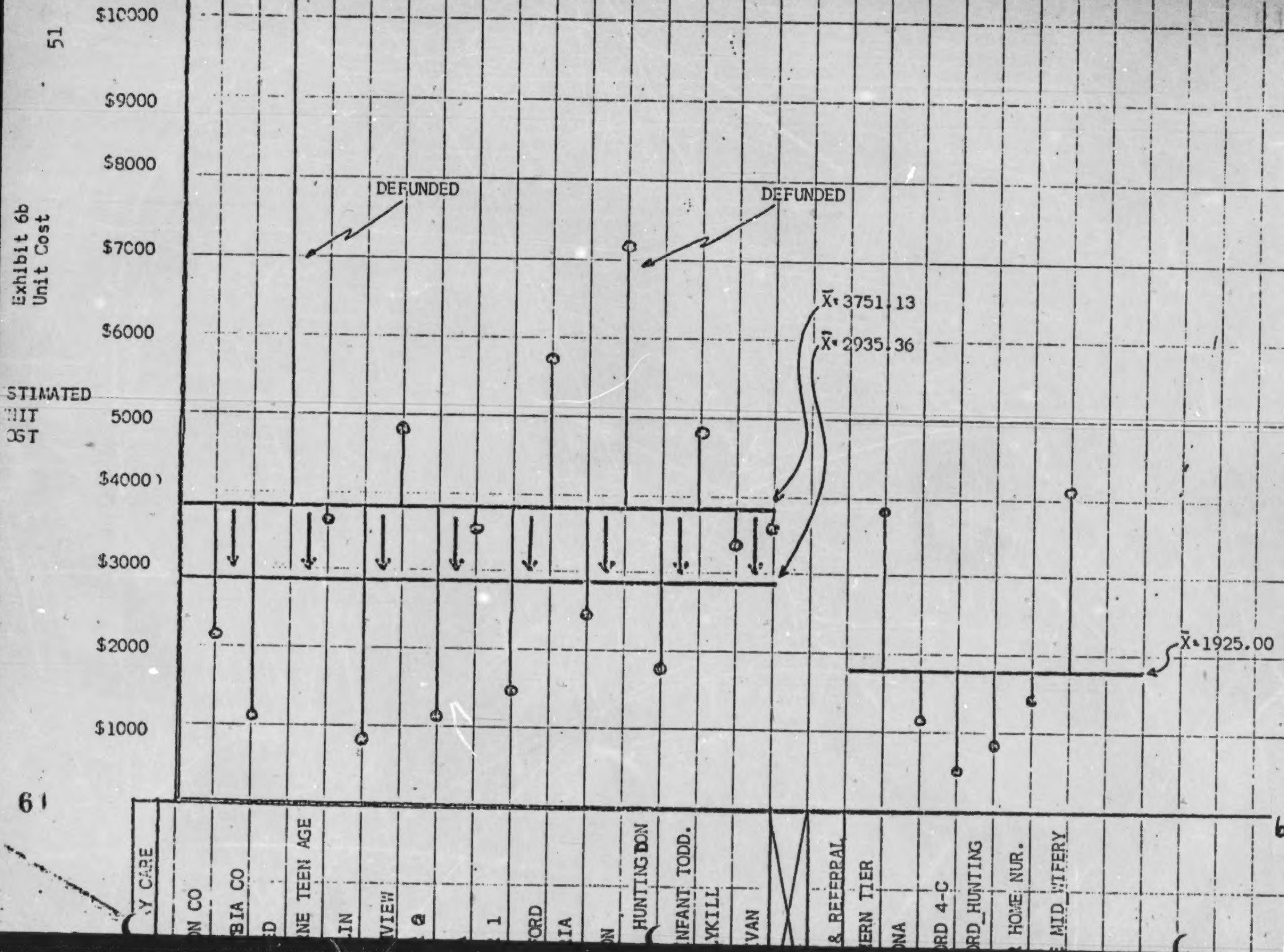


Exhibit 6b
Unit Cost

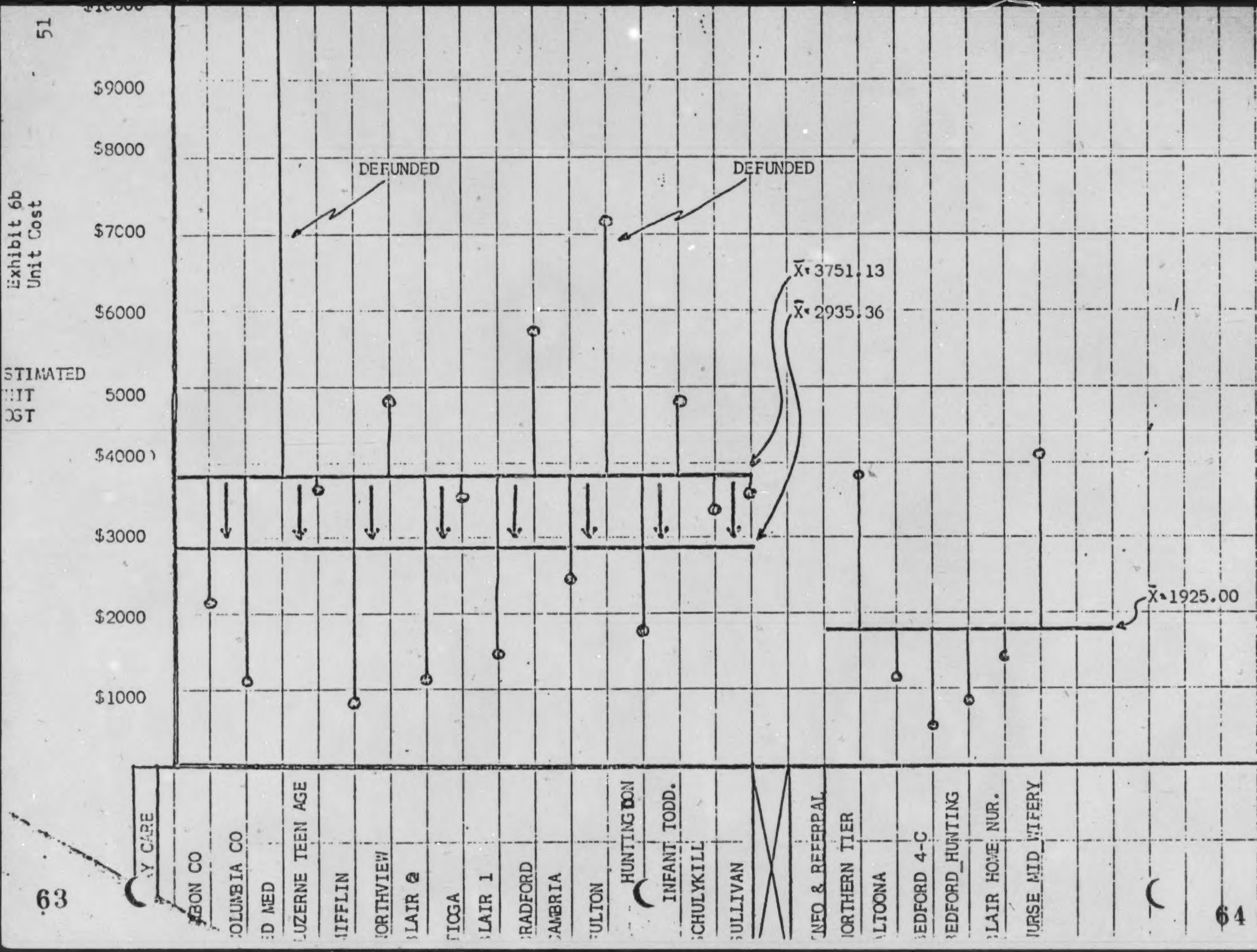


Exhibit 6a
SRT Visits

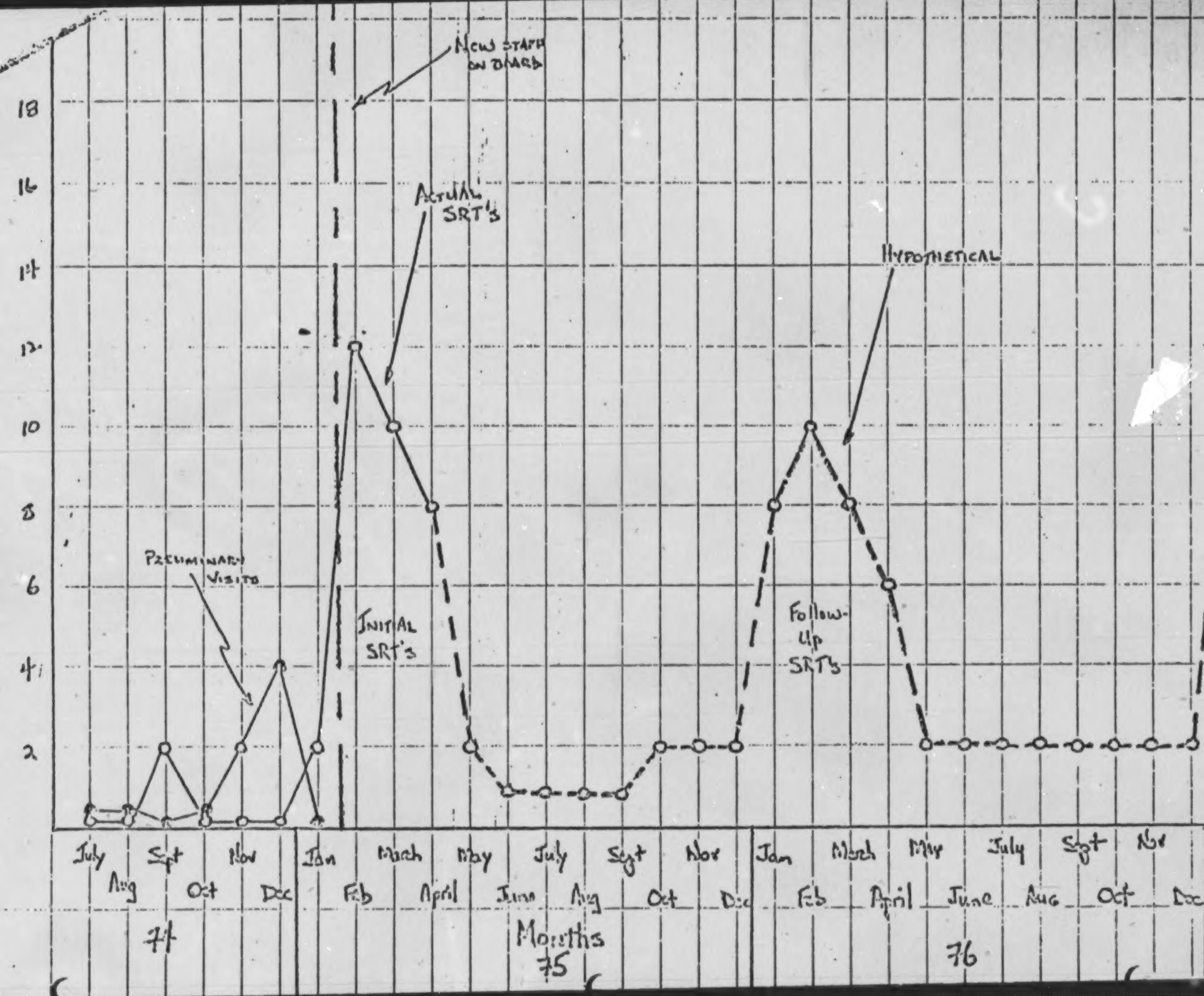
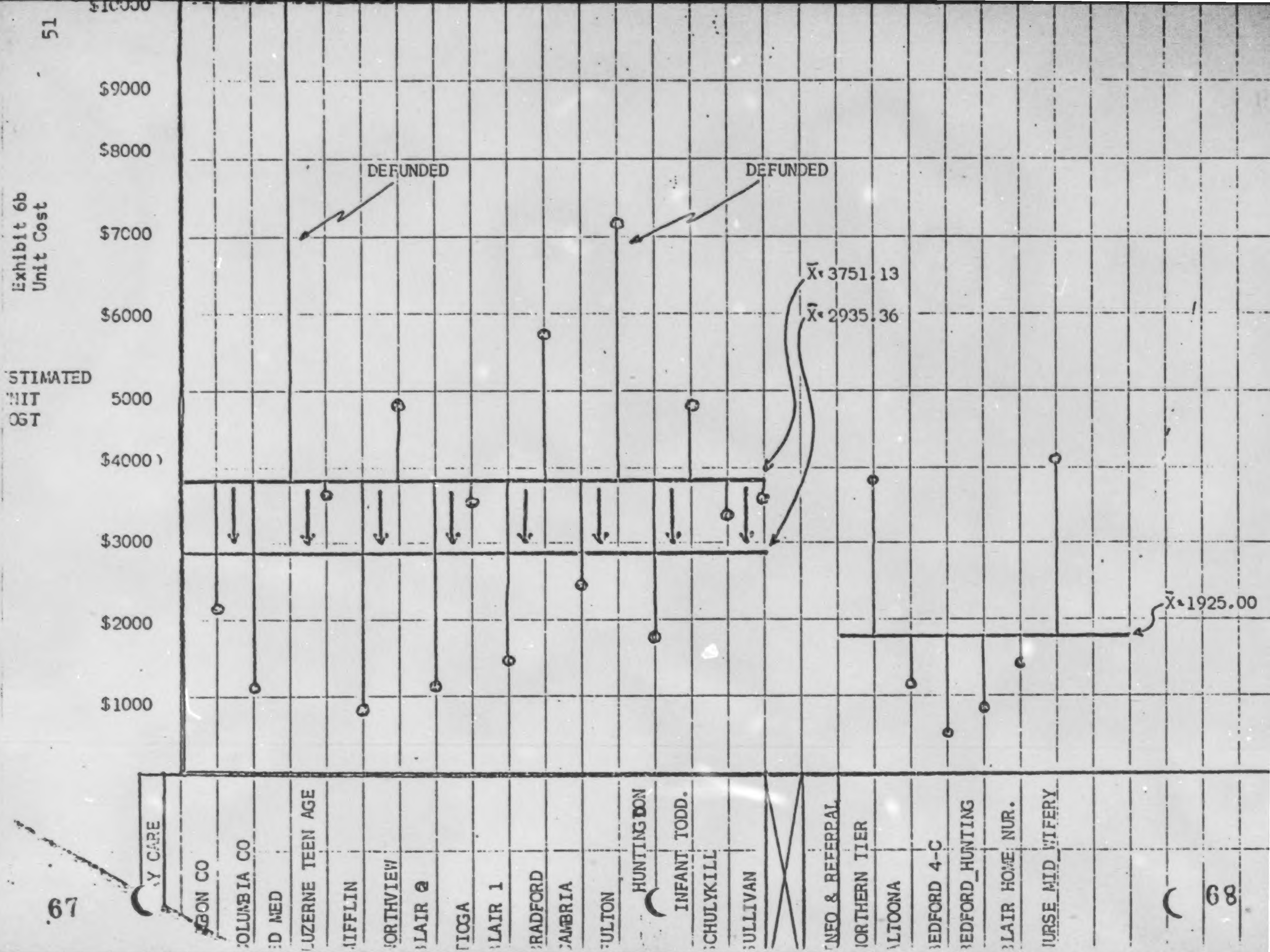


Exhibit 6b
Unit Cost



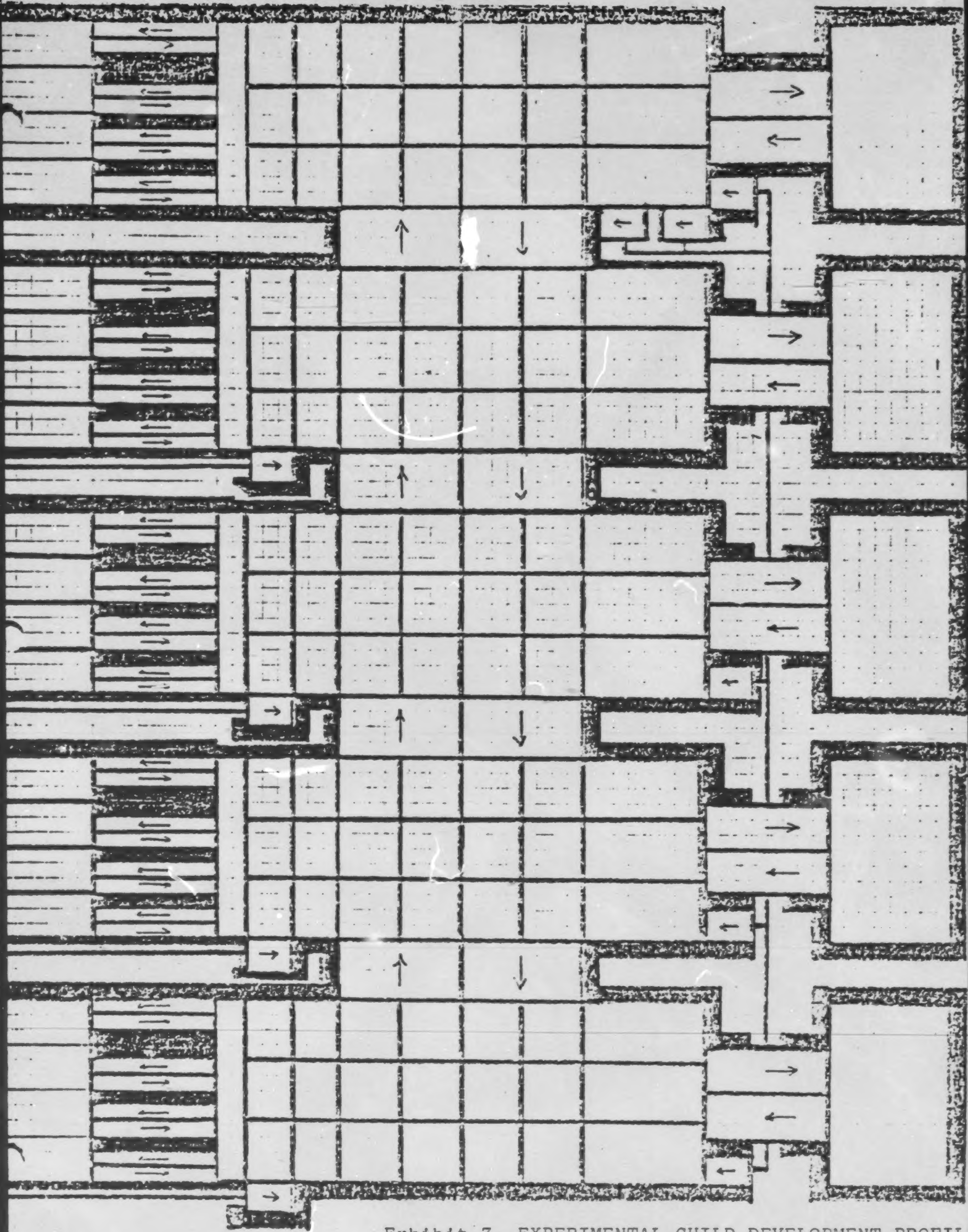


Exhibit 7--EXPERIMENTAL CHILD DEVELOPMENT PROFIL
To analyze movement and language occurrences by preschool children.

The last attachment is indicative of the type of statistics that we wi obtaining through our evaluation system. For example, that graph tells us th the mean ($\bar{X}$) unit cost for all our day care programs is $3751.13. It also tel us the deviation of each program from this mean. Depending on how great the de ation from the mean could determine the re-funding of a program. Another way of putting this is, if the program becomes too costly then we won't re-fund it. As one can see, this is exactly what happened with two projects--Ed-Med and Fulton Co. They were not providing the services as stated in their proposal. Their unit cost skyrocketed and became prohibitively expensive to fund. Once these two projects are removed, one can see that the unit cost across all projects drops considerably to a mean ($\bar{X}$) of $2935.36. This is an effective device to use in identifying probable problem areas.

With the system that we are developing, at any time we will be able to obtain any and all of the following data:

Ages of children served by all O.A.'s
Sex of children served by all O.A.'s
Race of children served by all O.A.'s
Number of children in group vs. family day care centers across all O.A.'s according to background, race, sex and job descriptions.
Total number of centers in all O.A.'s. How many are group centers. How many are family day care homes.
What are the staff/child ratios/age group across all O.A.'s?
How many classrooms are there per center.
We'll be able to find out how many programs are:

Piagetian
Traditional
Behavioral Analysis
Montessori

We'll even be able to find out how most children are spending the better part of each day.

Are we paying centers to sit children in front of a TV?
Are the children getting outdoors daily?

With information and referral projects we will be able to obtain the following data:

Case loads per caseworker; per county
Total number of cases
Number of home visits
Number of home visits/county
Number of home visits/month
    Number of home visits/caseworker
Where all the referrals are being made
    Are they medical?
    Are they dental?
    Are they psychological?
How many patients are receiving treatment?

Where are they receiving the treatment?

Is it medical?
Is it dental?   etc.

Above are only a sample of the type of retrievable data that can be drawn from the evaluation system we are presently developing.

CHAPTER 2

Theoretical Foundation and Research Backing

Obviously, EMIS did not develop over night. It is the result of five years of research into the ecology of the child. What follows is an explanation of how EMIS evolved and why it evolved and the research and data leading up to it's creation.

What I would like to do here is work backwards, beginning with my most recent summary of my work and research and then move in time to my previous research.

I initially got involved in this phenomena called ecological research and evaluation when I did an initial survey of day care needs in Suffolk County, Long Island, N.Y. This was done with the single purpose of identifying what centers could be used as possible research sites. These data were collected and with them certain other observations were made. In all programs I observed, either a Piagetian, Montessorian, or Bereiter--Engleman approach, there was a certain commonality, i.e. the teacher-child interaction. I don't care how much a director told me how closely he followed a particular theory, in all cases, bard none--the teacher-child interaction was the critical variable for all program success.

I then observed in some of the better programs in the country, which supposedly adhered to one of the above mentioned theories. Again I observed the same commonality across all centers, with regard to the teacher-child interaction.

I, therefore, set a goal for myself of looking at this adult-child interaction a little more scientifically. I engaged upon a strategy I called Individualized Instruction, which is actually a misnomer and should be called an ecological orientation to curriculum development. However, the above title appears in some of my published articles (Fiene, 1972, 1973) and unpublished (Fiene, 1971). The purpose of the approach was to look at the child-adult interaction; what was going on there? The I.I.P. approach I felt was the best way to look at this. I began with preschoolers (3-5) at a Long Island school and started to find some very interesting things about their interactions. I then switched my attention to a demonstration center using my techniques and found a problem using my criteria for adult-child interaction when it involved integrating toddlers into a preschool program. It was then decided to look at this problem closer in designing an I.I.P. for toddlers. As far as I know this was the first attempt at such an approach.

At this point, two pilot studies were conducted to look at the total interaction that was occurring in the respective centers. These two studies used an ecological approach as my curricular emphasis did above. These two pilot studies were then used to form a thesis around the necessity of language production as an important indicator of child growth in a day care setting. What was the nature of the verbalization produced by the children and how was this influenced by the verbal interaction with adults? This experiment was conducted in three various settings to measure this thesis: group day care, family day care, and in the home.

Definite differences were found and it appeared that the necessary first steps for quantifying the ecological environment of young children had begun. I then took my approach to a larger scale. My ecological experience began to become more and more scientific. One looked at the evaluations of such interaction from 0-4 years of age both verbally and socially. Another compared verbal interactions between adults and children in an experimental and naturalistic situation. And one looked at the effect of group size on verbal and social interaction. And a pilot study observation was done to look at the interaction of objects-adults and peers on the child. This needs follow-up at this point.

All of these studies are obtaining vital information on the child in his own day care environment--how he interacts verbally and socially and what affects this interaction. Now let me turn to some of these studies specifically. What follows is a summary of all my ecological research to date.

I would like to report on some experiments that I have completed in the child care field of a naturalistic format. The studies involve the effect of group size on language production; the evolution of the peer group regarding its language and social adjustments; some comments on adult, child, and peer talk in day care; the effect of group size and object placement on interactional patterns of adults and toddlers; and the relationship between language and movement in day care.

I would also like to share some thoughts about group size, horizontal and vertical grouping and intervention strategies.

Let me begin with a study which compared children's interactions and competencies in experimental and naturalistic conditions. I had always felt that when we experimented with children in laboratories it was very different from experimenting with children in their natural ecology. In analyzing protocols of children's speech in an experimental condition, I was finding that the speech patterns and sophistication of language was very different from what I observed in their everyday environments. I, therefore, had the children observed in their naturalistic nursery school environment. On initial analysis of the data, differences significant at the $p < .05$ level were found regarding sophistication of verbalizations produced. With the experimental situation, we found the child producing many more simple sentences, more of a restricted code. But place this child back in his everyday setting, and we find him producing many more complex verbalizations. What is found in the laboratory cannot be generalized to everyday life of a child. (Fiene, 1974) We need to find out more of what is happening day in and day out for these kids and not isolated events that the children never have been in before and probably never will be in again. (See Graph #3) In other words, we need to explore the child's day care ecology. We must use to our best advantage the natural setting in which a child finds himself or herself. Let's analyze more closely what actually exists out there now.

This discussion will revolve around a few themes, one, being the setting the child finds himself in; two, the effect of movement on language production; three, the influence of the peer group. The latter theme grew out of my observations from the Infant Care Program at the University of North Carolina and the Child Development Center at the State University of New York at Stony Brook. Having observed children in groups over extended periods of time, their interactional patterns were not of the typical group variety. These children were spending the first four years of their life in a day care environment within the same group of children. They were more like siblings, very clanish. In fact they were so closely knit, it was difficult for adults to keep control of the classroom (more of this latter). I feel that this is one of the most underresearched areas of concern, that of the peer group. We must look at the influence of the peer group on its members in more detail. They are learning from each other! (See Graph #2). Children in the language domain are learning most of their speech from adults up to about two years of age in a day care setting. After that point, the children are learning as much language from their peers as from adults.

I have data (Fiene, 1975a) which seems to indicate that children spend most of their early years (3½) talking with adults in basically simple sentences. There is a transition time at about three to four years of age where the children are engaging in as many simple as complex sentence structures. From about four and a half years and above, two things happen: children use predominantly more complex sentence structures and engage in more conversations with their peers than with adults. Maybe a possible source of intervention is through the use of the peer group with vertical grouping, something the British Infant Schools have been doing for quite some time rather successfully. In fact, the "Little Red Schoolhouse" used this concept for so many years before the experts came along and wanted to try something different=horizontal grouping, and this was regarded as a great milestone to handle the large influx of children into center city schools. We know where this concept has gone.

What happens when we increase group size in a classroom and how do we handle increases? As we increase group size, keeping the ratio of staff/children the same, communication nets break down. But in what fashion? From a study done by this author (1975b), data indicates that communication breaks down between adults, adults communicating with children, and children with adults. But peer talk doesn't break down. No differences were found in peer talk as group size was increased. So it isn't the kids who are affected but the adults. But how can we help the adults to handle this more easily? One way is to maintain a man to man defense with ratios less than 5-1, a zone defense from 5-1 to 10-1, and back to a man to man defense with a 10-1+ ratio. (By zone defense I mean assigning adults to activity areas. Man to man refers to assigning adults to particular groups of children.)

What effect does arrangement of activity areas have on adult-child interaction? In a pilot study, (Fiene, 1974) activity areas were either present or not with the introduction of additional children to a one-to-one design. With activity areas present, the introduction of children did not affect adult-to-child interactions greatly. However, introduction of additional children within a classroom without activity areas greatly affected the adult-to-child interactions. This experiment was conducted with 12-18 months old Ss. (See Graph #1)

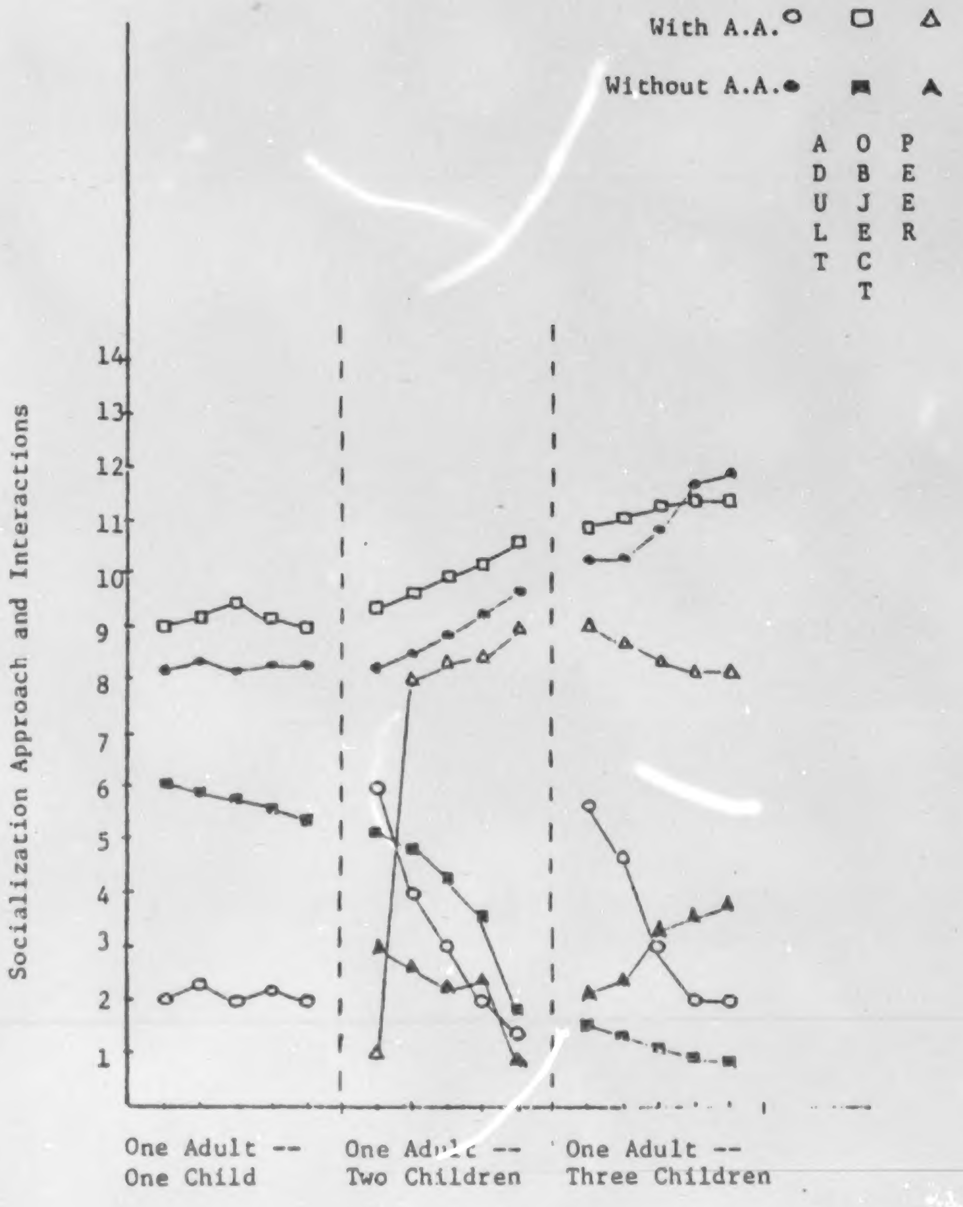
The last study I would like to describe (Fiene, 1975c) involves movement and language. A relationship was found in a previous pilot study (Fiene, 1973) with the amount of verbalizations produced and movement between and within activity areas in a day care setting. The more highly verbal children had a tendency to move more within areas than between; the less verbal children moved between areas more. The present study looks at restrictions imposed on Ss and their verbal output. Data indicate that the more restrictive an environment, the less verbalizations produced;

the more freedom to move, the more verbalizations. For further study is the relationship between physical development and language, locus of control and restrictions on movement in the infant/toddler age range. I am hypothesizing that the more restrictive an environment on an infant or toddler (12-18) the more external locus of control the child has. The more freedom an infant or toddler has the greater internal locus of control will be the case. The more of an external locus of control the less verbalizing the child does, the more internal locus of control the more verbalizing the child will engage in.

This graph depicts what occurs in an ecological setting when activity areas are introduced into a day care setting to the social interaction and activity levels of 12-18 month olds.

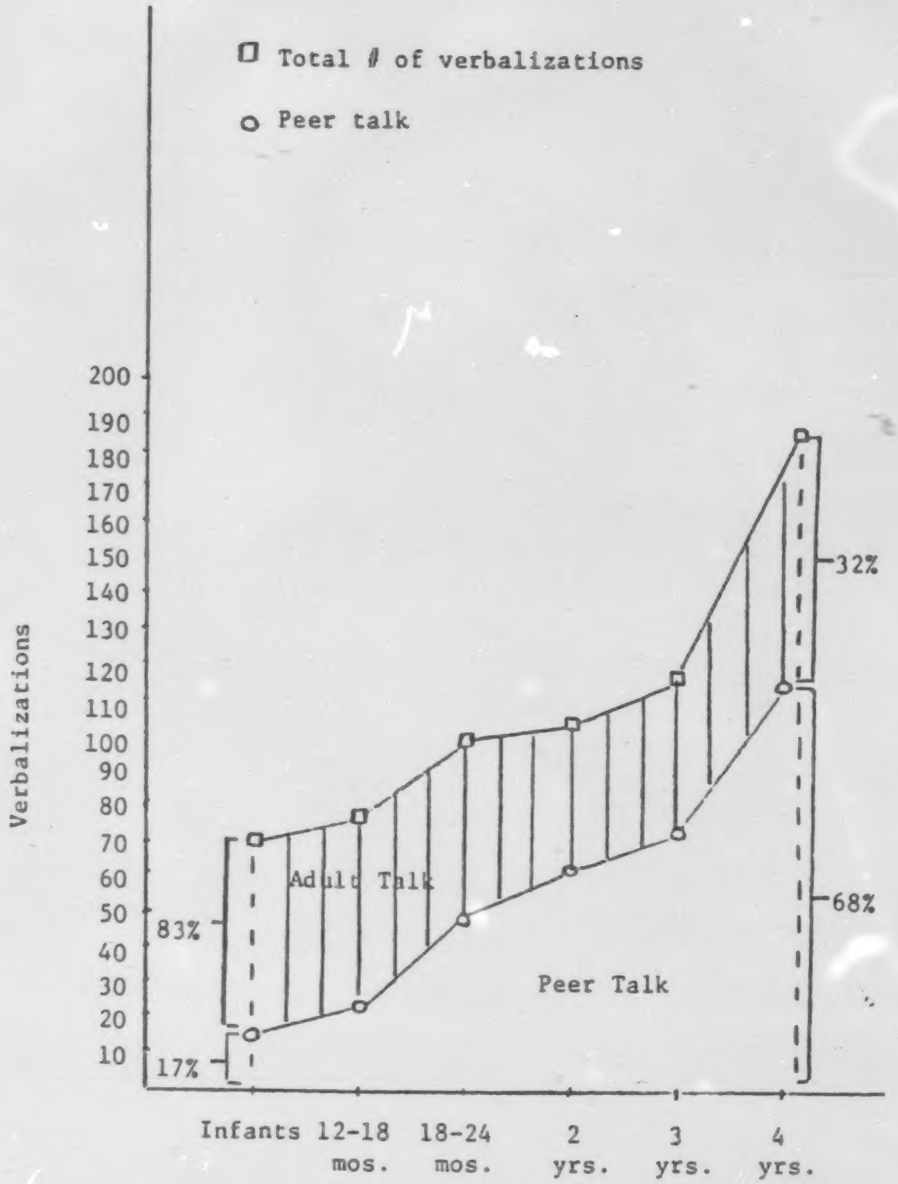
Graph #1

12 - 18 Month Olds -- Introduction of Activity Centers



The following graph depicts the amount of talking a Subject (S) does with his peers and with surrounding adults. From the studies described in the summary, it is evident that children talk more and learn most of their language from adults from birth to about two years of age. After that point, the peer group begins to assert itself. Ss are learning language from their peers as well as from adults.

Graph # 2

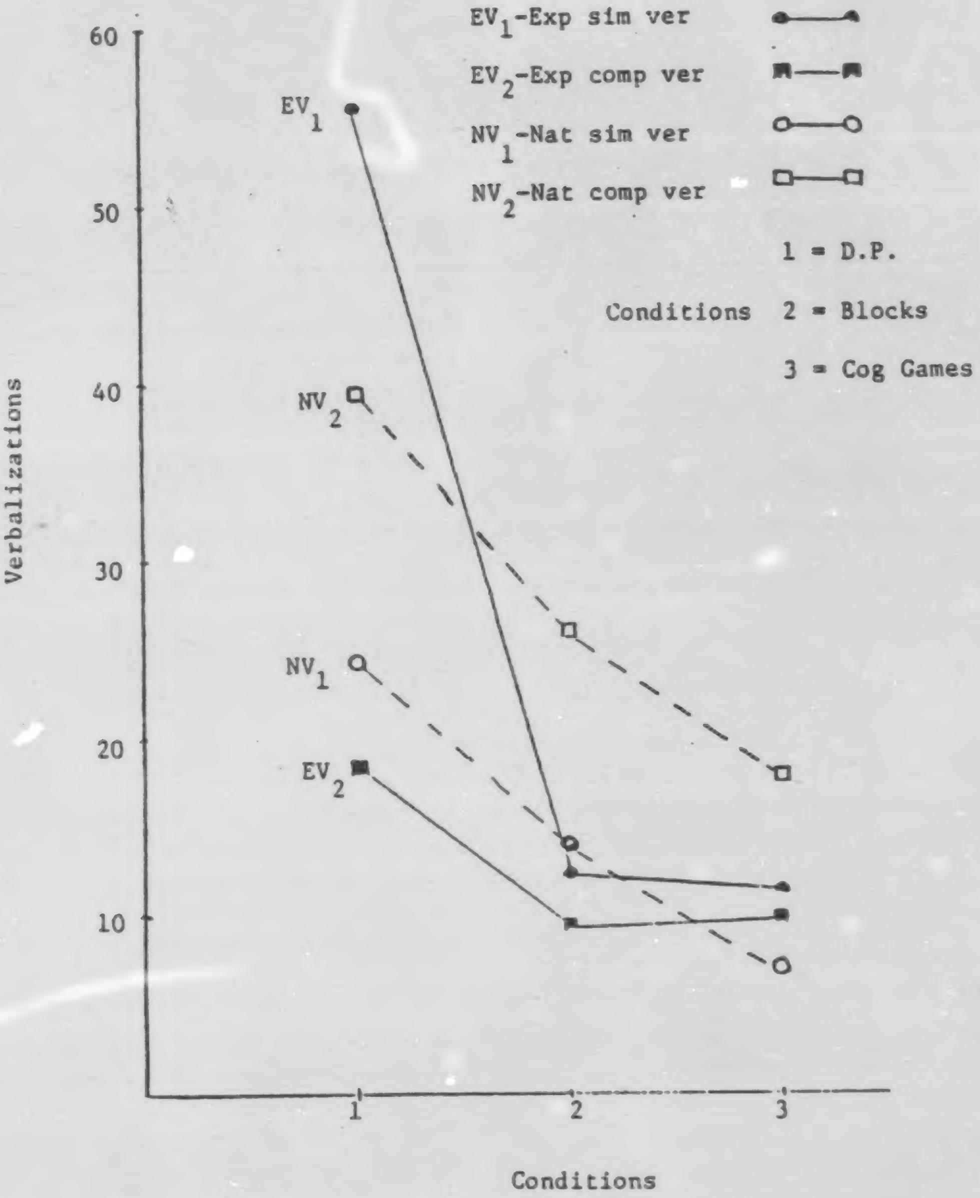


☐ Total # of verbalizations
○ Peer talk
Verbalizations
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
Adult Talk
Peer Talk
83%
17%
32%
68%
Infants
12-18 mos.
18-24 mos.
2 yrs.
3 yrs.
4 yrs.

This graph is the schematic of the first study explained in the summary. This study involves the differences found between a naturalistic and an experimental situation in three conditions: dramatic play, blocks and cognitive games. Total verbalizations and the complexity of verbalizations were greater in the naturalistic as versus the experimental situation.

Graph #3

Children's verbalizations in three conditions in either a naturalistic or experimental setting



This study reports on the effects of group size on the verbal interaction of peers and adults in a day care environment.

Relying heavily upon the research conducted in the early 1970's by Prescott (1971, 72) and Risley (1972, 73) in attempting to quantify various levels of interactions of both children and adults in various day care settings, this study is a specific endeavor in analyzing more closely the effects of the size of a group of children and adults upon its own members. This study, is more closely an outgrowth of other studies conducted by this author (Fiene, 1972, 1973a,b, 1974) in which analyses were employed to ascertain what changes would occur in rates of verbalizations while varying day care settings. After looking at the effects caused by group and family day care settings, age, sex and adult-child ratios, it was pretty certain that verbal interchanges were influenced in a significant way by the total number of children and adults found within a group setting.

Complexity of verbalizations was the dependent variable in this study, as it had been in all previous studies. The rationale for this, based upon the author's experience in working in a number of quality day care centers, is that level of complex verbalizations and total verbal output (being high) are effective indicators of what constitutes good, quality interactions between adults and children. This assumption has a base in research circles with other researchers (Gordon, 1969) who have been measuring the effectiveness of various day care environments.

Verbalizations are broken down into simple and complex stages. This breakdown is based upon McNeill's (1970) Classification of Sentence Structures. According to Mc Neill, a child's speech at age three can be categorized by particular sentence patterns that correspond to basic grammatical relations of two types: the first contains sentences with a noun and verb, or a main verb and object. The second consists of a head noun, modifier, main verb and object. These classifications provide criteria for categorizing the verbalizations the children made in the various settings.

Two areas of concern are to be analyzed within this study; one, what effect does group size, with maintaining adult to child ratios constant, have on verbal interchanges between adults and children; two, how are verbal interchanges (linguistic pragmatics) influenced by the activity areas that a child or adult finds himself in.

DESIGN

Subjects:

Thirty (30), three (3) year olds within a self-contained classroom with three full time teachers. The classroom was part of a private , for profit, day care center in the Greater Greensboro, North Carolina area. The classroom contained five (5) activity areas. Subjects (Ss) were matched on verbal output according to baseline data. This was to control for talkative individuals being over-loaded in one particular group condition. There were three groups of ten (10) children assigned to one adult. These ten (10) Ss stayed with this particular teacher when verbal recordings were made.

Materials:

Each observer was equipped with a stop watch and record pad for tabulating verbal interchanges.

Procedure:

After a reliability coefficient was extablished which was .90 or above, baseline data were obtained. On the grounds of this baseline, Ss were assigned to particular groups which consisted of 10 Ss and one teacher. Once this was accomplished, there were five conditions that the children and teachers find themselves in. These were as follows:

Conditions	Groups
10-1	A,B,C,
20-2	A+B
20-2	B+C
20-2	A+C
30-3	A+B+C

Each S was observed for 40 minutes, 10 minutes in four of the above possible five conditions. For example, S#4 who was assigned to Group A would be observed in a 10-1 Condition once, a 20-2 condition twice and a 30-3 condition once.

The observations took eight (8) weeks to complete. In this time span, Ss experienced all possible conditions in order to controll for all possible biasing of combinations of teachers and children.

Results:

Although I found only one result that proved significant, many of the other data had some very signigicant trends. In the following graphs, some of these data with their trends are reported.

STATISTICAL INFERENTIAL ANALYSIS

The configuration is that of a three-factor design, where factor one consists of three treatment groups, factor two consists of five activity areas, and factor three consists of two observers.

Ordinarily such a data configuration (matrix) would be analyzed using one of the commonly available three-way mixed design ANOVA computer programs, but certain problems prevented such a straight forward approach. First, initial scores for the three treatment groups were different, in spite of the fact that Ss were individually assigned to groups. Second, treatment groups were of unequal sizes. Third, data were missing from cells. A strategy to overcome these complications was arrived at through combined use of the General Linear Model (Cohen, 1968) and recent multiple regression computer programs (Fox and Guire, 1972).

Graph #4

Complexity of verbalizations is broken down into Simple (V1) and Complex (V2) verbalizations. This is graphed across group size. The simple verbalizations decrease as group size increases. This result is consistent with our predictions. However, in looking at the complex verbalizations the same relationship does not occur. The complex verbalizations decrease for the 20-2 condition but then increase in the 30-3 condition. This result is not consistent with any of my predictions. I then broke the verbalizations down a little differently in order to analyze this result.

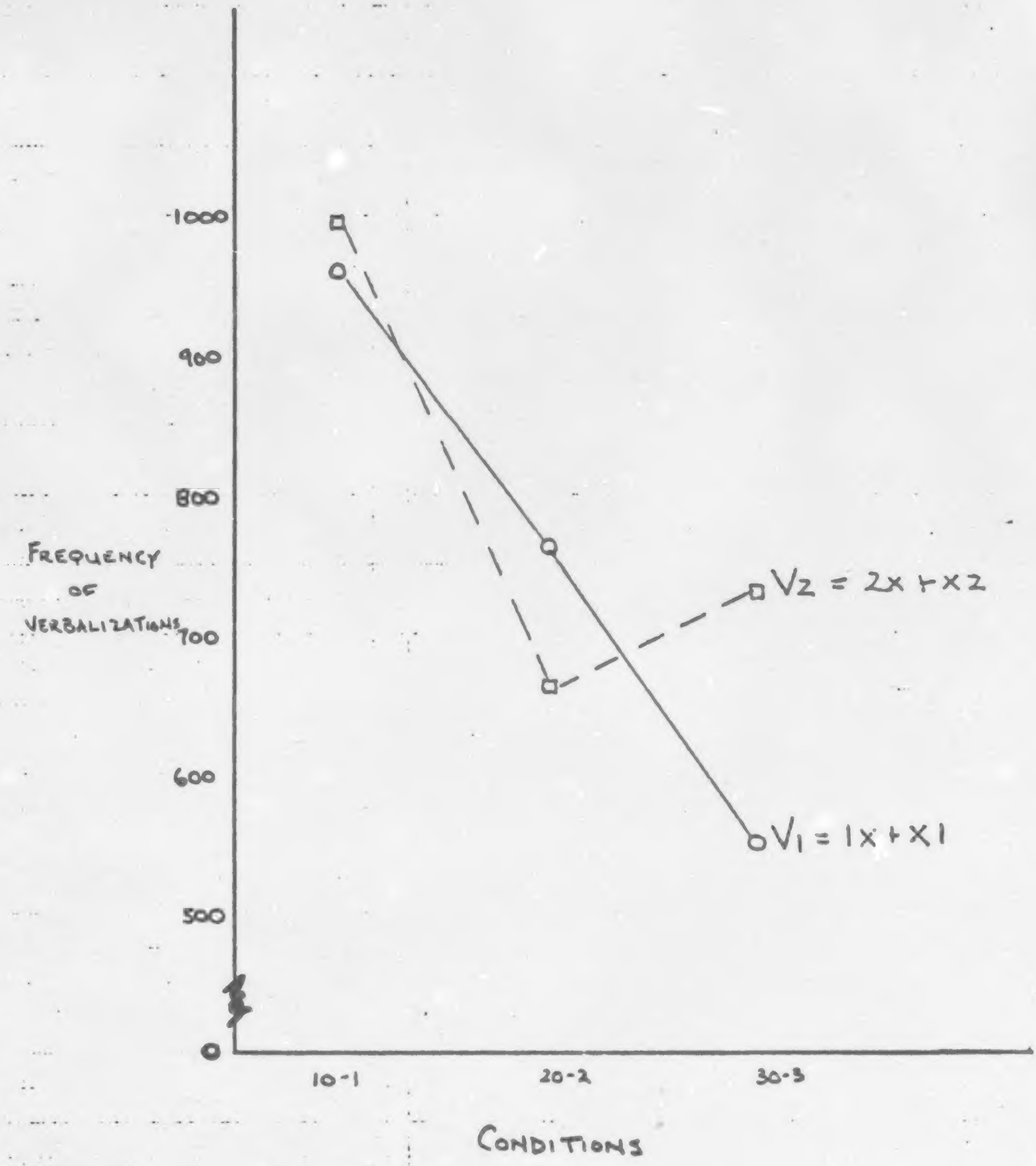
Graph #5

Verbalizations were divided into adult and peer talk in this graph. The adult verbalizations did decrease as the group size increased. However, in looking at the peer verbalizations there is a decline when the size of the group increased from 10-1 to 20-2 but when the group increased from the 20-2 condition to the 30-3 condition, the verbalization level increased.

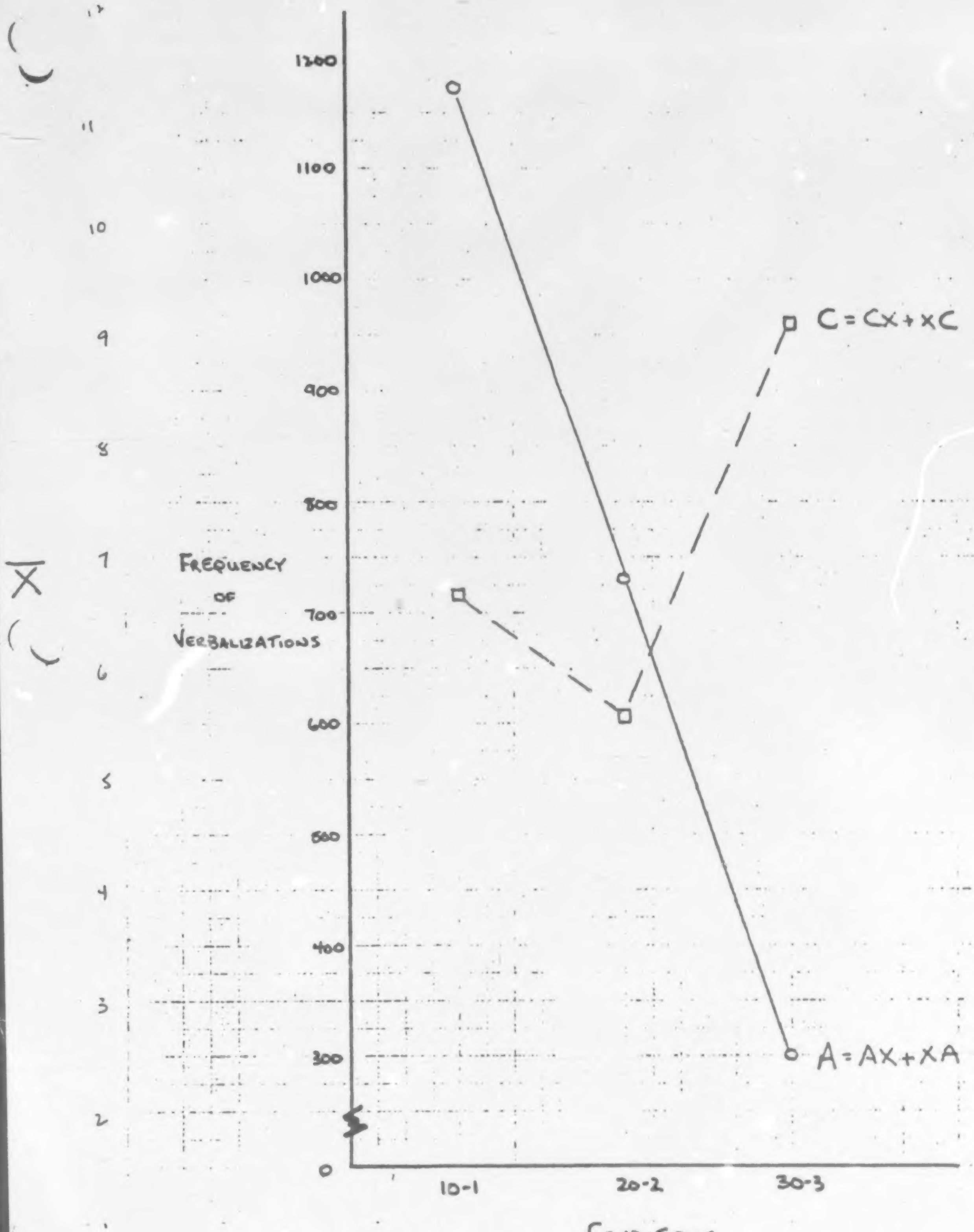
Graph #6

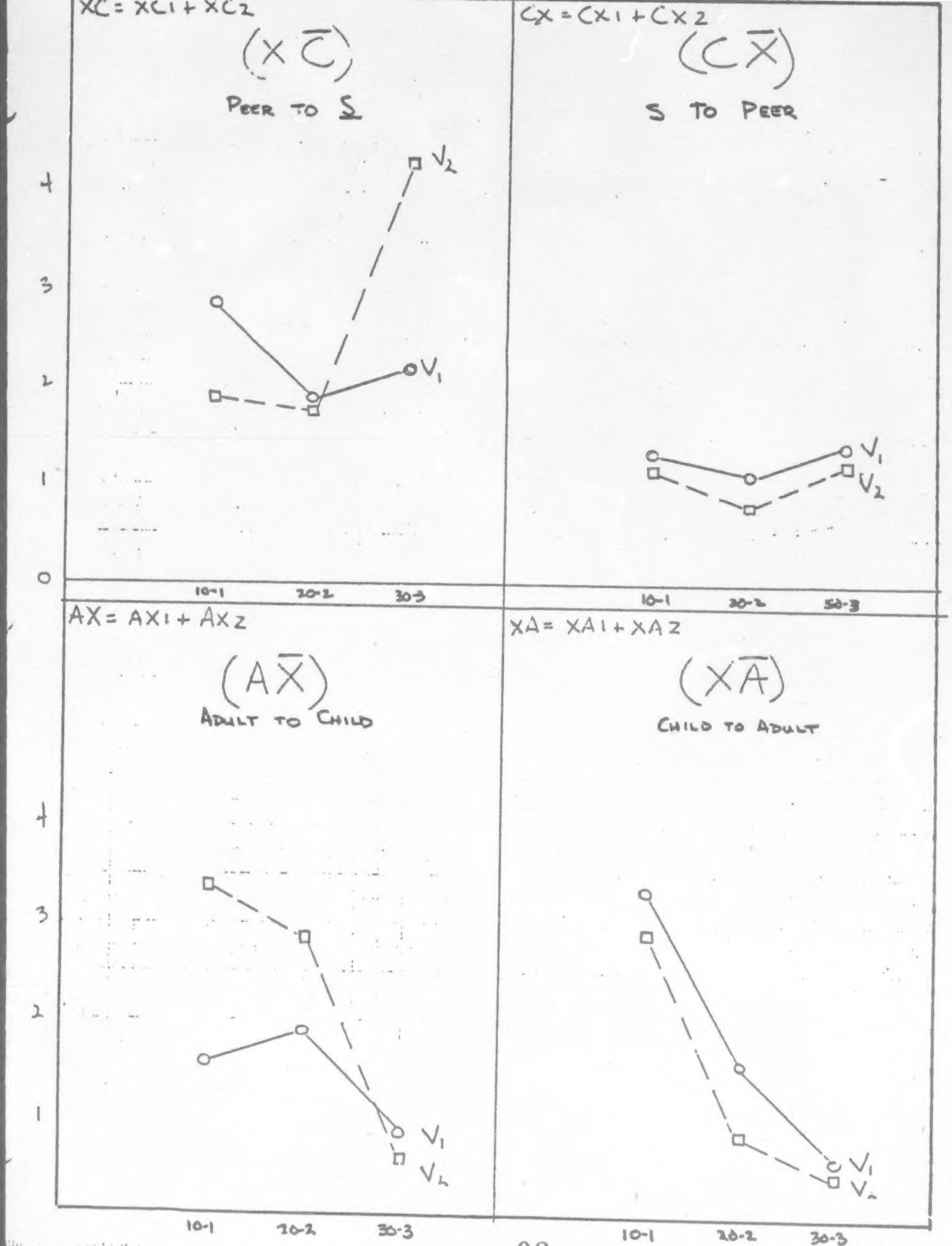
This graph breaks down verbalization levels according to complexity, adult or peer talk, and size of the group. Again the same relationships appear where the adult talk drops off significantly ($p < .05$) and the peer talk initially drops off but then increases in the 30-3 condition. These data support the data that were represented in the first two graphs.

Graph #4


FREQUENCY OF VERBALIZATIONS
1000
900
800
700
600
500
0
10-1
20-2
30-3
CONDITIONS
V2 = 2x + x2
V1 = 1x + x1

Graph #5


X̄
12
11
10
9
8
7
6
5
4
3
2
1200
1100
1000
900
800
700
600
500
400
300
0
Frequency of Verbalizations
C = CX + XC
A = AX + XA
10-1
20-2
30-3
Conditions


XC = XC1 + XC2
(X$\overline{C}$)
PEER TO S
CX = CX1 + CX2
(C$\overline{X}$)
S TO PEER
AX = AX1 + AX2
(A$\overline{X}$)
ADULT TO CHILD
XA = XA1 + XA2
(X$\overline{A}$)
CHILD TO ADULT
V1
V2
0
1
2
3
4
10-1
20-2
30-3

Discussions:

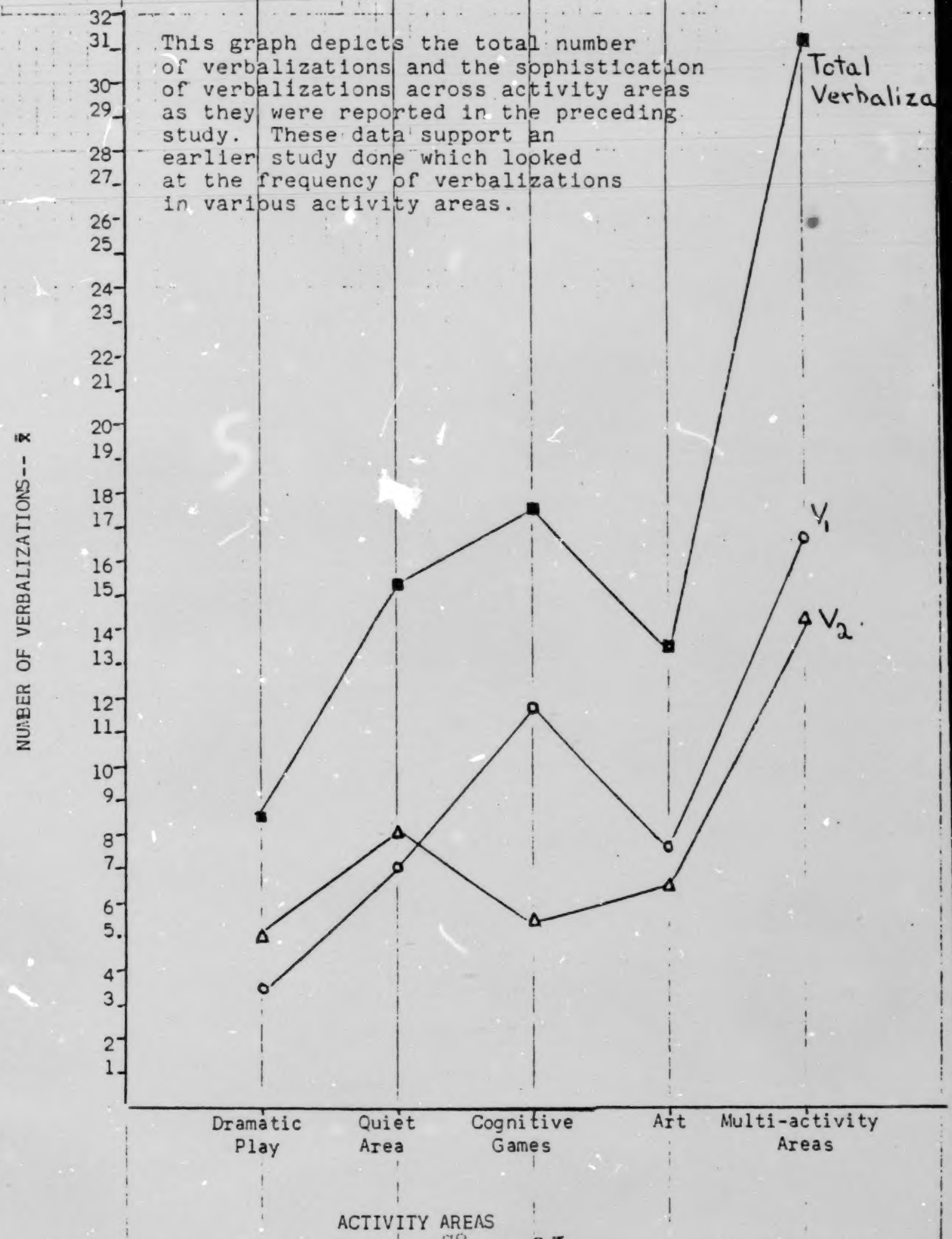
This study had some technical as well as some design flaws, which are presently being corrected in a larger and more controlled study. However, there are some very interesting trends that can be drawn from this study. One very interesting finding is the definite decline in verbal output and complexity in adult talk as group size is increased; this same relationship doesn't hold for the peer talk. Is there some form of egocentric language that the children are engaging in which is not influenced by external control? In past studies (Fiene, 1973) verbalizations were not broken down into peer and adult talk. No changes in adult or peer talk were expected; they would vary in the same manner. But now there appears to be differences in this variation. I would have predicted just the opposite effect with the adult talk not varying and the peer group varying. This result, even without looking at the influence of activity areas has implications for the educational arena.

It has always been assumed in the past, that large groups have deliterious effects on peer interactions. The trend in this study doesn't appear to paint the same picture. It is the teachers (adults) who are more affected by varying group size. We must not assume here that the children are essentially unaffected. If they are not influenced initially by group size, they will eventually because of the decline in the ability of the teachers to communicate effectively. As the teachers try to get controll of the room, they will be placing more restrictions on the children both socially and verbally. In other words, total levels of verbalizations will decline in the classroom. At this point, because of the tenuous nature of the data, I am not making the above statement unequivocally until I obtain the appropriate levels of significance to make such an inferential statement.

This study along with its replication should be read with its parent study (Asher, et al, 1975) which analyzes the teacher behaviors in more detail. Both studies, take a critical look at day care envirorments and ask some very pertinent questions. These are only the beginning in a series of studies to be completed by the above authors in order to begin to quantify day care envirorments.

Graph #7

NUMBER OF VERBALIZATIONS IN
VARIOUS ACTIVITY AREAS



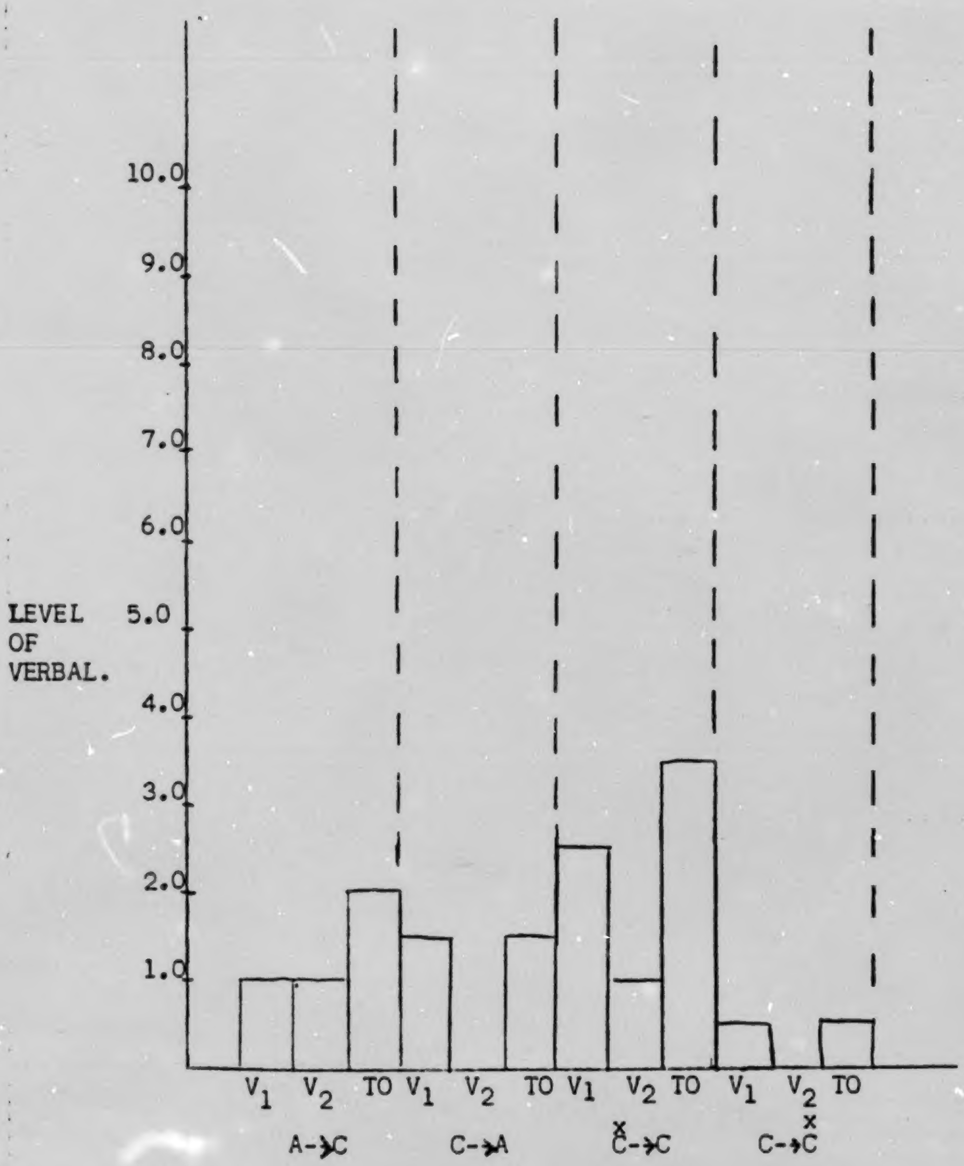
This graph depicts the total number of verbalizations and the sophistication of verbalizations across activity areas as they were reported in the preceding study. These data support an earlier study done which looked at the frequency of verbalizations in various activity areas.

The following graphs 8-11, break down the verbalizations produced by Ss in various activity areas and also show the direction of the verbalization. These data are all from the study just described involving group size. The graphs show how the peer verbalization is so much greater in the quiet or reading corner. The majority of the adult verbalizations are in the cognitive games area. These two results are the direct effect of the enlarged group size. Usually dramatic play is a high elicitor of verbalization with peers. But as size increases, that is not the case. The children verbalize most in the free-play area which is what has occurred in the quiet area. It is less structured because the teachers could not keep control. Notice the little verbalizing by adults. The teachers gravitate to the cognitive games area as size increases, because it is the one area with the greatest deal of structure with least attention by adults. This is why the verbalizations are so high here. Usually a cognitive games or quiet area is a good elicitor of verbalization for adults, but not as high as it is here.

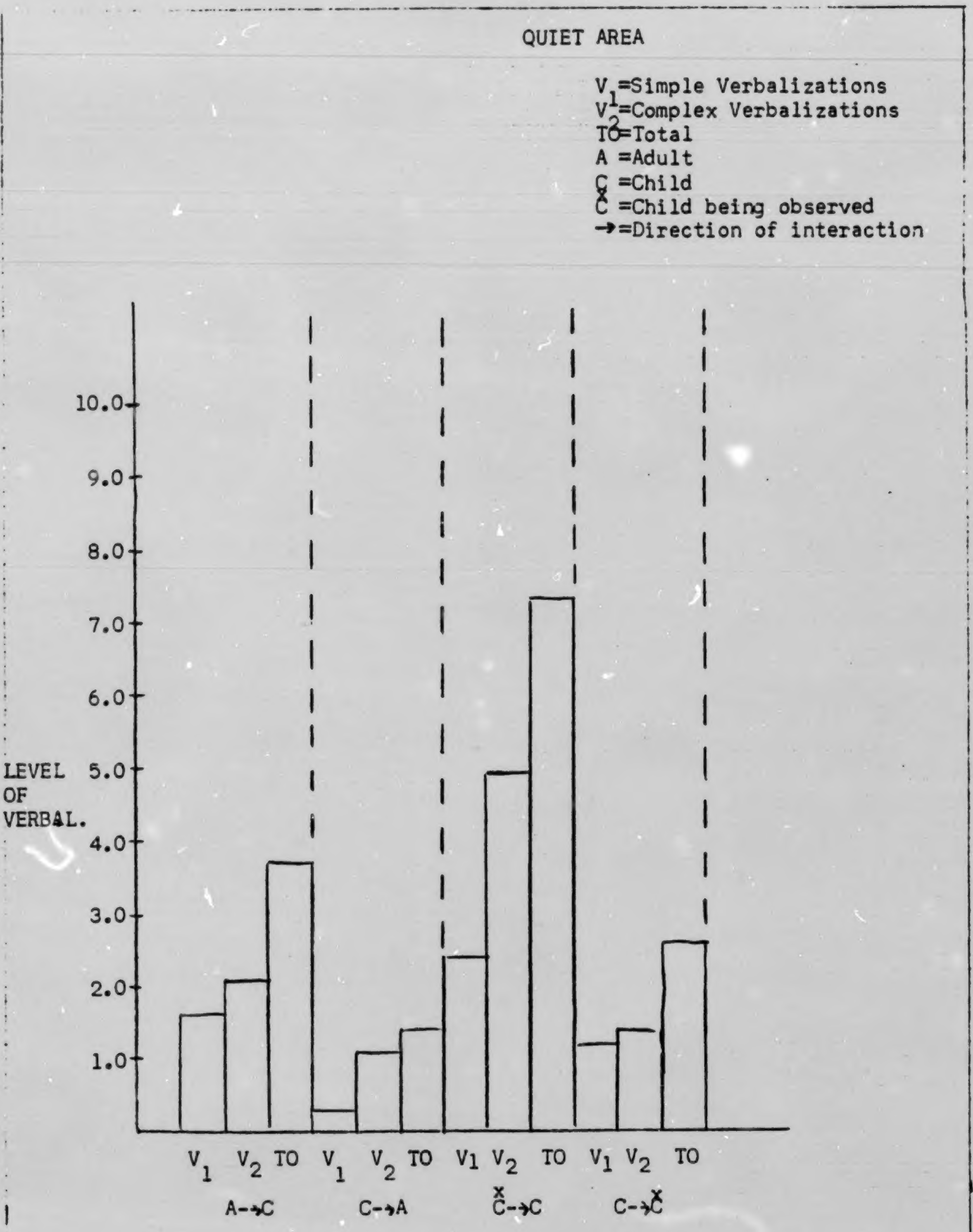
Graph #8

DRAMATIC PLAY
ACTIVITY AREA

V_1 =Simple Verbalizations
V_2=Complex Verbalizations
TO=Total
A =Adult
C =Child
$\overset{x}{C}$ =Child being observed
→ =Direction of interaction



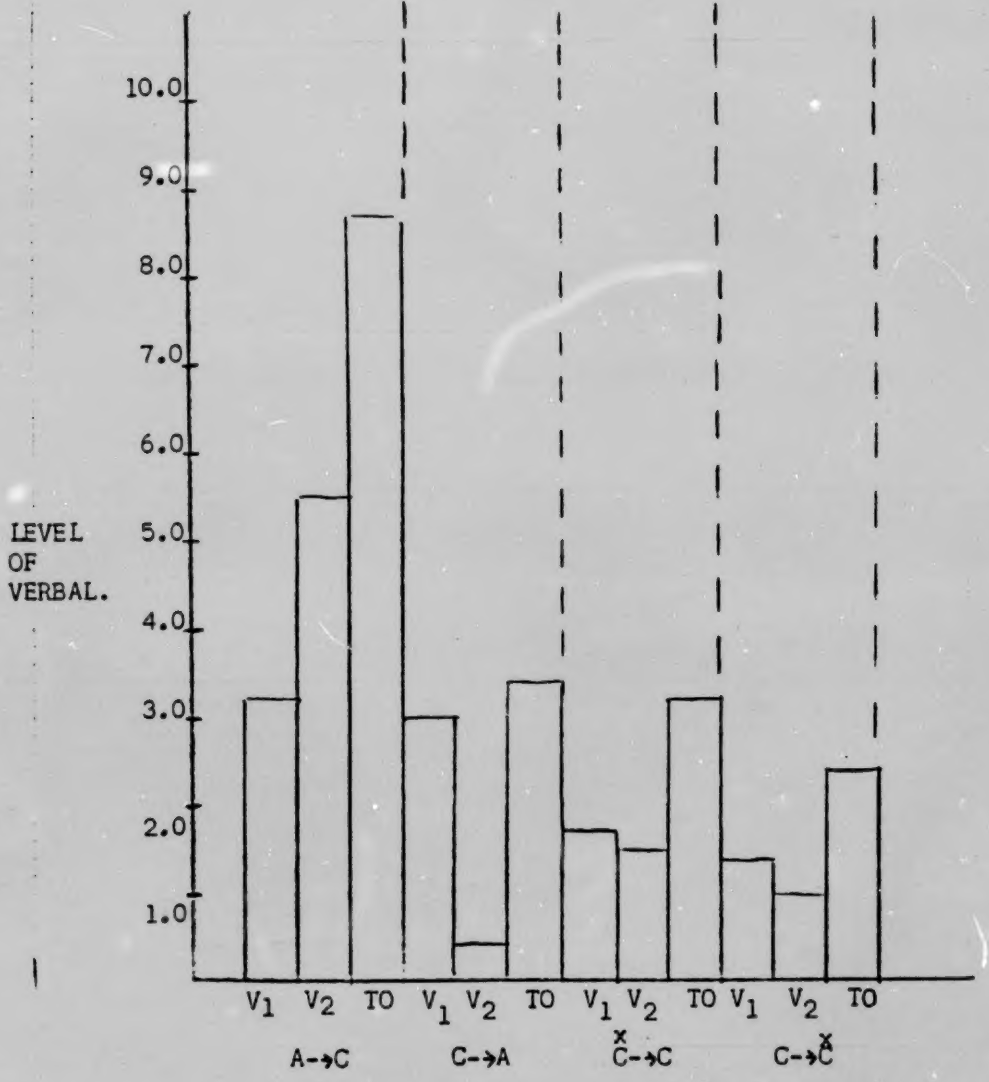
Graph #9


QUIET AREA
V_1=Simple Verbalizations
V_2=Complex Verbalizations
TO=Total
A =Adult
C =Child
$\overset{x}{C}$ =Child being observed
→=Direction of interaction
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
LEVEL OF VERBAL.
V_1 V_2 TO
A→C
V_1 V_2 TO
C→A
V_1 V_2 TO
$\overset{x}{C}$→C
V_1 V_2 TO
C→$\overset{x}{C}$

Graph #10

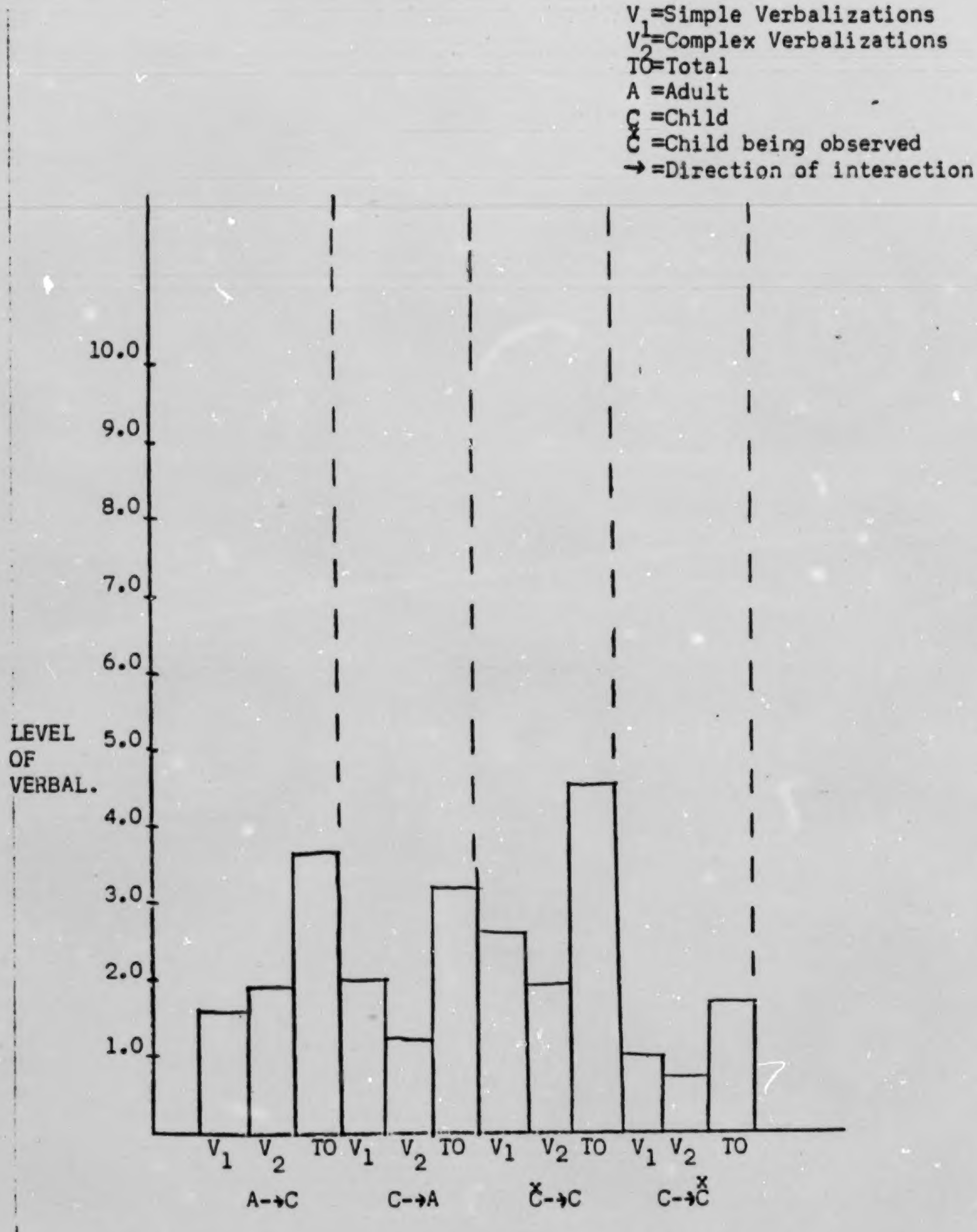
COGNITIVE GAMES
ACTIVITY AREA

V_1=Simple Verbalizations
V_2=Complex Verbalizations
TO=Total
A=Adult
C=Child
$\overset{x}{C}$=Child being observed
→ =Direction of interaction



Graph #11

ART ACTIVITY AREA



The following study reports on a further analysis of verbal interactions in family and group day care centers. This study is the precursor for the group size study.

There are many theories concerning preschool education and the various approaches to curriculum development. Three basic approaches to curriculum development cited by Swenson (1972) are: cognitive (e.g. Weikart, 1969), socio-emotional (e.g. Evans, 1971), and language development (e.g. Evans, 1971). The primary assumption underlying language based curricula is that language development is the foundation of all learning, since without command of words, a child not only has a hard time communicating, but he or she has a hard time thinking (Swenson, 1972). There are currently a number of language based programs in use, such as: the Tucson Early Education Model (1970), Bereiter-Engelmann Structural Pedagogy (1969), and the early intervention programs of Karnes (1969), Palmer (1970), Gordon (1969) and Levenstein (1970). The Bereiter-Englemann Language curriculum is composed of an integrated set of basic concepts, sentence forms and presentation strategies. It is recognized by Bereiter-Engelmann that academic success requ ires a functional repertoire of basic concepts and language skills (Evans, 1971).

Some research (Ervin, 1964) has indicated that language is acquired through modeling (modeling from adults, in particular parents). Two assumptions need to be made here: (1) that the environment for a child in learning his language is the home environment with both parents present providing the child with adequate language modeling (it is assumed that the parents are loving, stable individuals concerned about the welfare of their child). Data from parent training projects (Levenstein, 1970) provides support for this assumption. (2) Also an assumption is made that when a child leaves his home and enters an environment similar to his home that the verbalization levels/language production will be equivalent in both settings (Sale, 1973). With these above assumptions, if a child does model the speech of his parents then learning environments most closely resembling the home environment will be best for the child's language development. Therefore, possibly a "Cooperative" where the child's mother is present for part of the day or a "Family Day Care Center" in which a caregiver in the mother's community would be taking care of the children in their own neighborhood in a house very similar to the children's own home would be most conducive to the child's language development.

However, if children learn language through modeling from peers, then what would be a conducive environment for their language development (Grotberg, 1971)? Probably a larger center with highly verbal children interacting greatly would be more appropriate. To some extent these two premises will be assessed in this study; that is, the proposal is directed at the question of whether children verbalize at a more sophisticated level in one of the following environments: a Group Day Care Center, or Family Day Care Center.

It is perhaps important to first describe the stage of language development of a three year old, the likely recipient of day care. According to McNeill (1970) a child's speech at age three can be categorized by particular sentence patterns that correspond to basic grammatical relations of two types: the first contains sentences with a noun and verb or a main verb and object. The second consists of a head noun, modifier, main verb and object. These classifications provide criteria for categorizing the verbalizations the children will be making in the various environments.

In a recent study Cazden (1966) found that children in the age range 36-40 months old were producing utterances that were approximately 3.60 morphemes in length.

It was further found that the level of noun phrases were more developed in an object position than in a subject position. This effect along with McNeill's sentence patterns provided the basis of analysis of verbalizations and sentence structures in this study.

A pilot study using these criteria has been conducted (Fiene, 1972b). The subjects were five male and five female children 36 to 50 months of age attending a day care center with approximately 25 children. Verbalizations were categorized by simple (e.g. I go) or complex (e.g. I will go but not now). In a design like LeLaurin and Risley (1972) ten children were observed in both Group and Family Day Care settings. For a month, the group was in the Group Day Care Center (population approximately 25 children) in which observations of verbalizing during activities were taken. During a second month following the division of the children into several Family Day Care Centers (each center with a population of five children), the group was observed while engaging in similar activities. Results suggested that the children produced more sophisticated sentence structures (i.e. there were more complex than simple sentences produced) in the Family Day Care Centers than in the Group Day Care Centers.

However, there were many problems with these data:

the sample was too small. The children were matched only for IQ, not for other relevant variables. The age range was too wide, and the staff were not trained for the type of verbal interactions with subjects.

This experiment carried out in a natural setting studied the types of verbalizations that 36-40 month old children made in three different custodial settings--Family Day Care Centers, Group Day Care Centers, and Home environments. The following predictions were made: first, that children verbalize more in a Family Day Care Center than in a Group Day Care Center; and second, that the nature of the verbalizations produced by the children in the Family Day Care Centers is more sophisticated than the verbalizations produced in the Group Day Care Centers. The latter being operationalized in terms of sentence complexity.

METHOD

Subjects:

Subjects were 48 Caucasian children, 36-40 months of age, attending Day Care Centers at least six hours daily. Eight children, four males and four females, were selected from two Large Group Day Care Centers[1] (N=16). Four children, two males and two females, were selected from four Family Day Care Centers[2] (N=16). Sixteen children, eight males and eight females, were selected from 16 Homes[3] (all single child families). The latter group acted as the control group.

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[1] Large Group Day Care Center-- a typical Nursery School or Day Care Center with a population of about 45 children. The 16 Ss used for this experiment were selected from the total population of 90 children from the two Group Day Care Centers.

[2] Family Day Care Center--neighborhood mother who acts as a caregiver for her own children and usually 3-4 of her neighbor's children.

[3] The homes were selected by the observers who were familiar with the local area that the centers and homes were located. However, none of the observers knew the parents personally who were selected for the in-home group. This home group was compiled through friends of the observers who knew of people who were one child families with the particular child in the age range that was needed for the study

Subjects were matched for age, sex, race, IQ (Bayley Scales of Intelligence was used[4]). See Table 1 for results of matching. Staff, programs, and content were matched in homes and centers for type of structured day, scheduling, and planned activities. All the centers were nursery school programs with equal emphasis on all curriculum areas--encouraging a well rounded child (this was also the emphasis of the homes).

Insert Table 1

Materials:

Each observer had a stop watch and each observer team consisting of two observers had a tapedeck and a wireless microphone.

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[4] The author conducted the Bayley's. They were given to the *Ss* when they were between the ages of 24-28 months. There was a total sample of 110 subjects that the 48 *Ss* were selected from. It was extremely difficult matching the children on all of the above criteria because of the size of the sample. Therefore the *Ss* were matched as closely as possible, as can be seen in Table 1.

Table 1

Subjects Matched Demographically

Family Day Care				Group Day Care				Homes			
Ss	Sex	Age	IQ	Ss	Sex	Age	IQ	Ss	Sex	Age	IQ
S1	F	40	130	19	F	40	135	33	F	39	128
S9	F	38	130	22	F	40	130	34	F	38	126
S16	F	38	121	29	F	39	125	36	M	39	124
S2	M	40	120	24	F	38	119	44	F	37	121
S3	F	37	119	32	F	37	118	46	M	36	121
S11	F	36	118	30	M	37	117	43	M	37	120
S12	M	36	115	17	F	37	110	45	F	40	115
S7	F	36	109	28	F	36	108	47	F	36	114
S4	M	37	104	27	M	37	105	48	M	38	110
S13	M	38	101	18	M	36	105	40	F	39	101
S14	F	38	100	23	F	38	101	38	F	40	101
S5	F	39	100	31	M	40	100	37	F	38	100
S8	M	40	99	20	M	40	100	35	M	39	100
S6	M	39	98	25	M	40	99	42	M	37	98
S15	M	38	96	21	M	39	97	39	M	36	98
S10	M	36	95	26	M	36	94	41	M	37	95
Totals		37.9	109.2	Totals		38.1	110.2	Totals		37.8	110.3

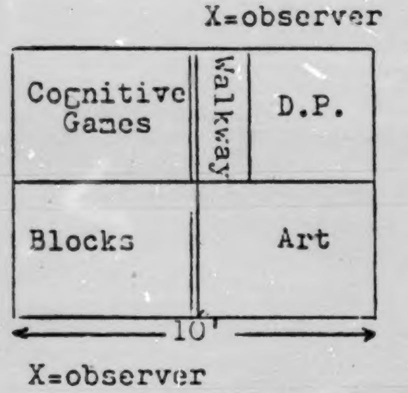
Setting:

The centers and homes were in the Brentwood, Bay Shore, and Islip Townships located in the South-Central portion of Long Island, New York. These were low to middle income areas with a high concentration of Spanish speaking adults.

In each home and center there were well-defined activity areas with distinct boundaries as depicted in Graph #12(if the homes did not have the well-defined areas, the author helped to set such areas up by providing the appropriate equipment for the areas and the necessary dividers for the room). These activity areas were a cognitive games area, a blocks area, an art area, a free play area, and a dramatic play area. The centers and homes were matched as closely as possible for the locations of activity areas. That is, the cognitive games area was always adjacent to the dramatic play area. The

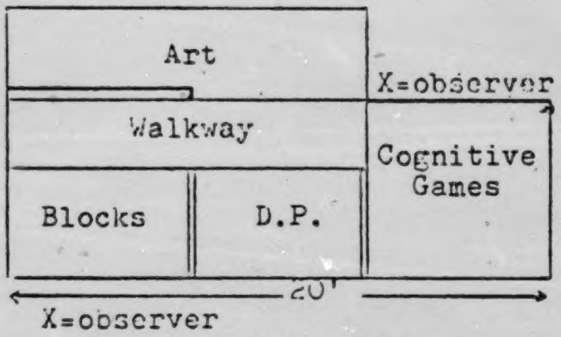
Insert Graph #12

HOME

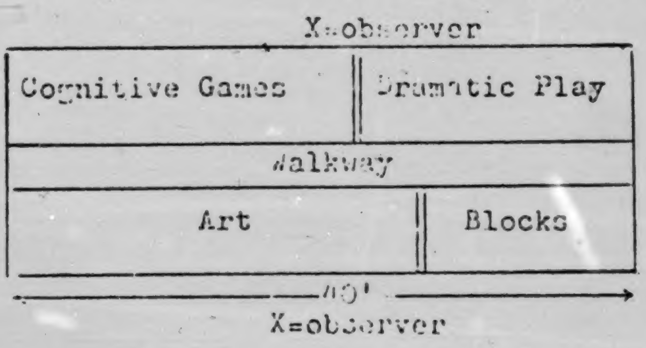

X=observer
Cognitive Games
Walkway
D.P.
Blocks
Art
10'
X=observer

D.P.=Dramatic Play

FAMILY
DAY CARE
CENTER


Art
X=observer
Walkway
Cognitive Games
Blocks
D.P.
20'
X=observer

GROUP
DAY CARE
CENTER


X=observer
Cognitive Games
Dramatic Play
Walkway
Art
Blocks
40'
X=observer

═══ Waist high (adult) shelves or toy cabinets acting as room dividers.

blocks area was always adjacent to or across from the dramatic play area. The art area was always adjacent to the blocks area. The free play area was always outdoors (See Graph#12). Activity areas were delineated on the following criteria: Blocks area--an area that contained any type of building toys (erector sets, unit blocks, hollow blocks); Art area--contained crayons, coloring books, easils, collage materials (felt, paper, scissors); Cognitive games area--contained puzzles, manipulative small muscle toys; Dramatic play area--contained dolls, carriages, dress-up materials; Free play area--contained outdoor equipment and large muscle equipment. Activity areas were broken off from each other by waist high (adult) shelves or toy cabinets. In all the centers and homes, all activity areas were emphasized equally (i.e. children spent an equal amount of time in all areas).

Recordings:

Three trained observer teams were used through the duration of the experiment. These observer teams recorded the verbalizations made by a child only if the child were actually in a particular activity area engaging in an activity when verbalizing (i.e. child had to be playing--picking up a toy, reading a book, dressing up, pushing a toy, or pulling a toy-- the child had to be acting on some object within a particular activity area). The observers recordings were entered on a observation record sheet [redacted]. If the child were verbalizing but not in an activity area, or moving from activity area to activity area, or going to the bathroom (i.e. the child was not acting on some object within an activity area); this type of behavior was classified as "extraneous" behavior on a record sheet and no recordings were taken.

Subjects were free to move from activity area to activity area whenever they wished and were allowed to bring toys from activity area to activity area; however, their verbalizations were not recorded.

Procedure:

The observers who did the recordings are preschool teachers[5]. Three are females, three are males. Observer teams were one male and one female observer.

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[5] The observers were: Toni Vaccarro, Andrew Clay, Stephen Wilson, Ruth Mayer, Josephine Caferelo, and Joan Consaine.

Training of observer teams was conducted four weeks in advance to collecting the data for this study. Training consisted of having the observer teams use practice children in Day Care Centers that were not part of the project. Centers were chosen where the day care environment was very similar to what the observer teams would encounter in the actual project. The observer teams were instructed to take down everything that the child said during a particular recording session.

The observer teams entered a center participating in the project two weeks prior to the collection of data so that the observer teams could work with the subjects in helping them adjust to wearing a wireless microphone and to having the observers in the centers and homes. As shown in Graph #12 the observers were located on the periphery of the room. The observers were free to move along the periphery of the room within the homes or centers in order to hear the children clearly. The observer teams spent 40 minutes in the morning between 10:00 A.M.--11:00 A.M. and 40 minutes in the afternoon between 1:30 P.M.--2:30 P.M. in the centers and homes. These times were selected for the staff interacted with the children as little as possible during this time. There was no large group play, the children were engaged in solitary play and it was much easier recording the children's speech.

The observer teams spent the 40 minutes in the centers as follows: for the first ten minutes; first, the observer team would synchronize their stop watches such that each observer started observing at precisely the same time. Then the observers took longhand recordings and taperecordings [redacted] independent of each other of a subject. The particular subject was selected in advance. If this subject were absent, there was a make-up day at the end of the three weeks. Subjects' whereabouts when verbalizing (verbalizations were simple (V1) or complex (V2)--see Table 2 for McNeill's classification of sentence structures) was recorded and timed. For example, four minutes in cognitive games area playing with manipulative toys, 30 seconds verbalizing--20 V1 and 10 V2 verbalizations; extraneous behavior in moving from area to area. Three minutes in dramatic play area in dressing up and

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Insert Table 2

Table 2

McNeill's Classification of Sentence Structures

CATEGORY	Sentence STRUCTURE	CORRESPONDING GRAMMATICAL RELATIONS
Simple Verbalization (V1)	P+N	modifier, head noun
	N+N	modifier, head noun, subject, predicate
	V+N	main verb, object
	N+V	subject, predicate
Complex Verbalization (V2)	P+N+N	modifier, head noun
	N+P+N	subject, predicate, modifier, head noun
	V+P+N	main verb, object, modifier, head noun
	V+N+N	main verb, object, modifier, head noun
	P+N+V	subject predicate, modifier, head noun
	N+N+V	subject, predicate, modifier, head noun
	N+V+N	main verb, object, subject predicate
	N+N+N	subject, predicate, modifier, head noun

playing with carriages, two minutes verbalizing--40 V1 and 35 V2 verbalizations; extraneous behavior in going to the bathroom. Four minutes in cognitive games area playing with the manipulative toys, one and half minutes verbalizing--15 V1 and 10 V2 verbalizations. Total time of 10 minutes in activity areas, four minutes verbalizing --75 V1 and 55 V2 verbalizations made by Subject 1. For Subject 1 this was his first individual recording session. There would be eight more recording sessions identical to the above [redacted].

In the next ten minute individual subject recording session, the observer team would again synchronize their stop watches, then they took longhand recordings and taperecordings independent of each other of a second subject.. This second subject was selected in advance. Procedure used with first subject was used with the second, third, and fourth subjects in order to finish out the 40 minutes of recordings. The total time for verbalizing for each subject over the three weeks was 90 minutes. All the observer teams recorded in all the centers and homes so that the 90 minutes recorded of each subject was 30 minutes of observer team α, 30 minutes of observer team β, and 30 minutes of observer team γ [redacted]

[redacted].

In the homes there was a change in procedure. Homes were selected which were in close proximity to each other so that it was easy for an observer team to take their recordings in one home and then move over to another home easily. The individual subject recording sessions were 20 minutes rather than 10 minutes long of each child. The total recording sessions were 40 minutes. The recording sessions were identical to the procedure used in the centers. The only difference is that each individual subject recording session was 20 minutes rather than 10 minutes. The total time for verbalizing was 80 minutes for each subject in the homes over the three week period.

Reliability was calculated by each observer team after each 40 minute recording session. Reliability was calculated by taking the number of agreements between the two observers of an observer team for a particular area and for that particular recording session on the number of V1 and V2 verbalizations produced by a subject. Then this figure was divided by the number of agreements and disagreements between the two observers for that same area and recording session on the number of V1 and V2 verbalizations produced by the subject.

Reliability average were as follows: for observer team α, observer team β, and observer team γ respectively: .96, .92, and .94 for the dramatic play area; .98, .97, and .90 for the cognitive games area; .97, .95, and .91 for the free play area; .96, .93, and .89 for the blocks area; and .97, .96, and .93 for the art area.

RESULTS

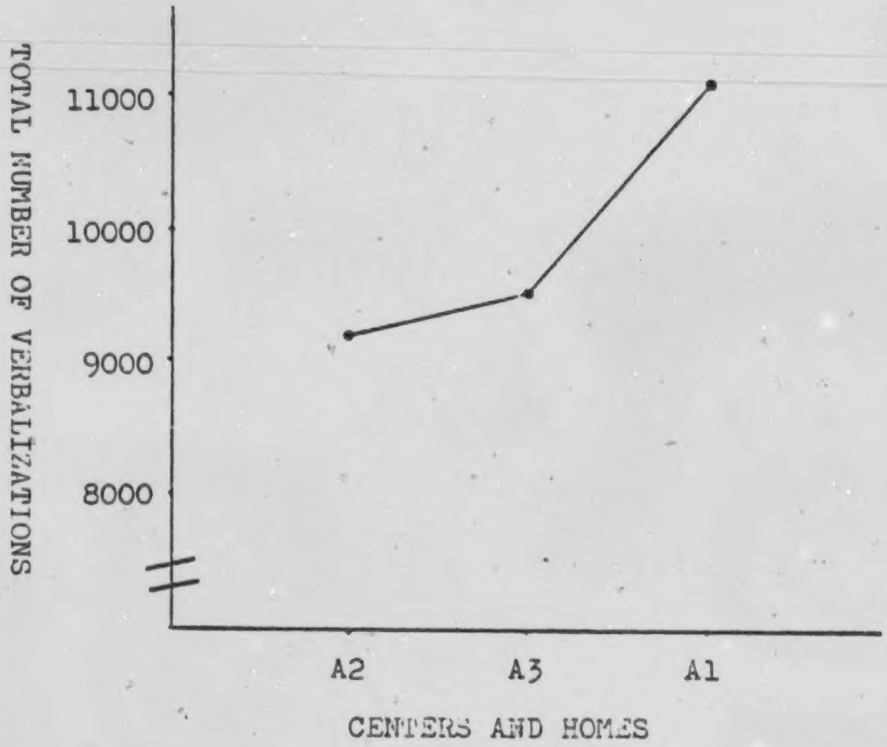
The principal analyses of the data were concerned with: (a) whether the subjects verbalized more in the Family Day Care Centers than in the Group Day Care Centers; (b) whether the V1 and V2 verbalization levels produced by the subjects were significantly different in the Family and Group Day Care Centers.

To analyze the verbalization levels produced by subjects within the centers and homes, the data was plotted as depicted in Graph #13. Graph#13 shows that the total verbalizations produced by the subjects in the Family Day Care Centers were significantly higher than the verbalizations produced by the subjects in the Group Day Care Centers and the Homes.

Insert Graph # 13

Table 3 using a mixed design analysis of variance (Myers, 1972) shows that the children in the Family Day Care

Graph #13



A3--Group Day Care Centers

A2--Homes

A1--Family Day Care Centers

Centers were significantly different from the children in the Group Day Care Centers and the Homes with respect to the total verbalizations produced by the subjects ($F=4.02$, $df=2$, $p < .05$).

Insert Table 3

Graph #14 illustrated how the rate of verbalizing differed in the Family and Group Day Care Centers, and the Homes on a cummulative basis. The subjects in the Family Day Care Centers had the highest rate of verbalizations per minute (7.89); followed by the Homes (7.49 verbalizations/minute); and lastly by the Group Day Care Centers (6.51 verbalizations/minute).

Insert Graph #14

How the rate of verbalizations differed in the Family and Group Day Care Centers, and the Homes on a day to day basis in shown in Graph #15 The subjects in the Family

Table 3

Analysis of Variance[6] for the study of Centers (Family Day Care Centers, Group Day Care Centers, and Homes); activity areas (cognitive games, art, blocks, dramatic play, and free play); and observer teams--α ,β, and γ .

SOURCE	df	MS	F
Centers (A)	2	4701.98	4.02*
Activity Areas (B)	4	1585.20	5.47***
Observers (C)	2	11.69	0.89
Subjects (S)	47		
S(A)	45	1170.41	
A X B	8	779.96	2.69**
S(A)B	180	289.98	
A X C	4	45.22	0.67
S(A)C	90	68.04	
B X C	8	72.94	0.24
A X B X C	16	60.46	0.20
S(A)B X C	360	299.00	

*$p < .05$
**$p < .01$
***$p < .001$

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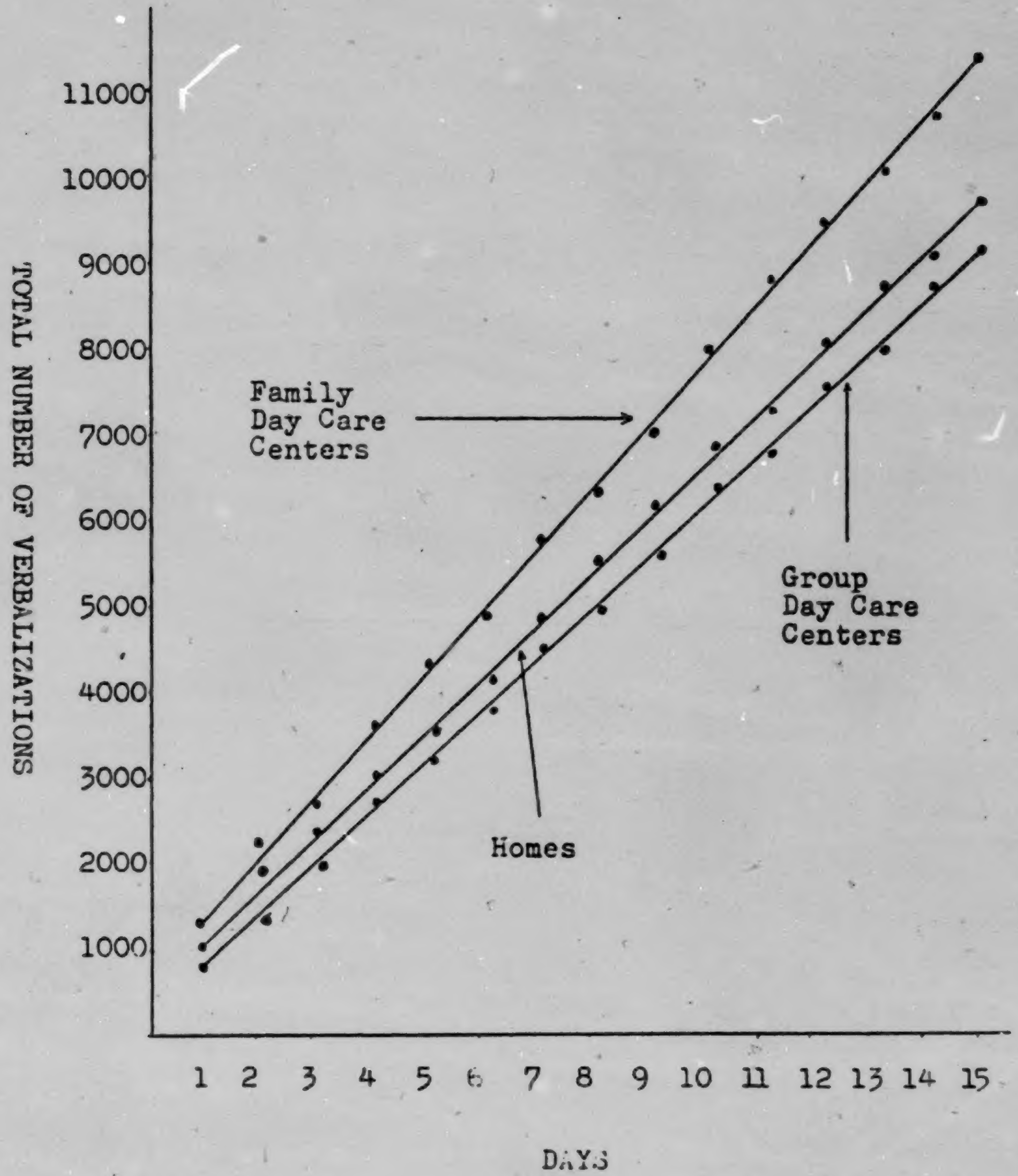
[6] Myers, Jerome L., Fundamentals of Experimental Design, Second edition, Allyn and Bacon, Boston, 1972, pps 219-221. Analysis of Variance, one between- and two within-subjects variables.

Graph #14

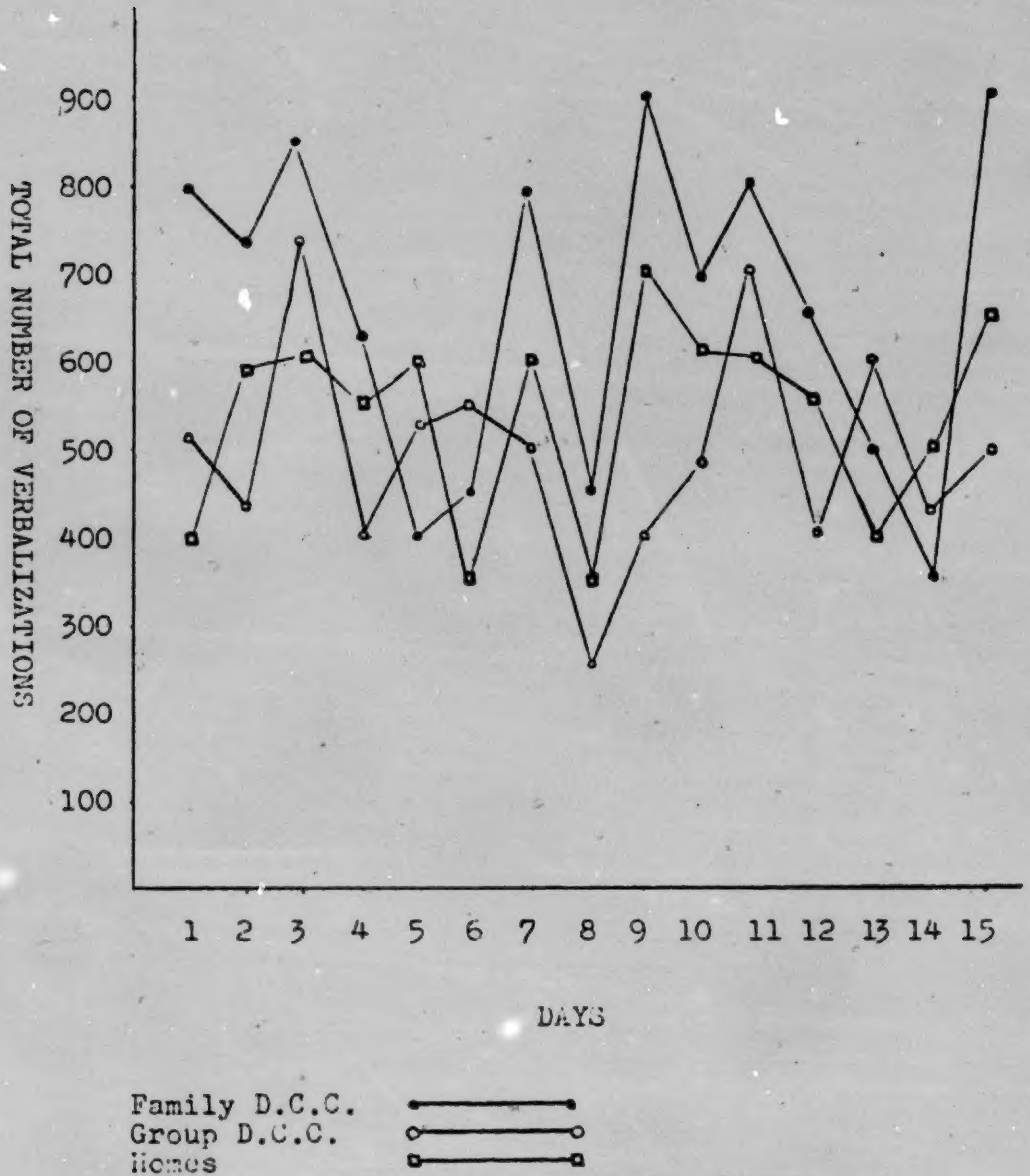

TOTAL NUMBER OF VERBALIZATIONS
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
Family Day Care Centers
Group Day Care Centers
Homes
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
DAYS

Day Care Centers had the highest mean of verbalizations per day (651.20); followed by the Homes (619.30 verbalizations/day) ; and lastly by the Group Day Care Centers (540.80 verbalizations/day).

Insert Graph #15

Graphs #14 and #15 clearly demonstrate that the highest rates of verbalizing occurred in the Family Day Care Centers, followed by the Homes and Group Day Care Centers. However, the large gap between the verbalizations in the Family Day Care Centers and the Homes that exists in Graph #13 occurred because the total time spent in the Homes recording for the three weeks was only 1280 minutes while in the Family and Group Day Care Centers it was 1440 minutes of recording. Using the Homes' rate of verbalizations (7.49 verbalizations/minute) for 1440 minutes, there would not be as large a gap which exists between the Family Day Care Centers and the Homes. Graph #13 would show the Family Day Care Centers and the Homes much closer together in total verbalizations with the Group Day Care Center significantly lower.

Graph # 15


TOTAL NUMBER OF VERBALIZATIONS
900
800
700
600
500
400
300
200
100
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
DAYS
Family D.C.C.
Group D.C.C.
Homes

In Graph#15 the Family and Group Day Care Centers and the Homes are all increasing or decreasing together in their levels of verbalizations on certain days (six [illegible] days--day 3, 4, 7, 8, 11, 15). For instance, on the eigth eigth day both the Family and Group Day Care Centers and the Homes are all decreasing to very low verbalization levels. The reason for this is that there was no free play outdoors because it rained on that particular day. The loss of this activity area (free play), which was the second highest activity area in eliciting verbalizations from the children, did affect the total verbalizations level for that day. The low points on Graph#15 usually indicated that the children were confined indoors for part or all of the day because of poor weather. The children were then spending more time in activity areas that did not yield as high verbalization levels as the free play area. The high points usually indicated a recovery with the children engaging in free play on the following days.

Another way of presenting the data in Graph#15 is to look at the amount of verbalizing that occurred in the activity areas over the total three weeks period of data gathering. Graph#16 shows that the variability occurred amongst the activity areas because the least amount of verbalizing during the three weeks was done in the block areas, followed by art, cognitive games areas which were essentially the same, with the most verbalizing in the dramatic play and free play areas in all the centers and

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Insert Graph # 16

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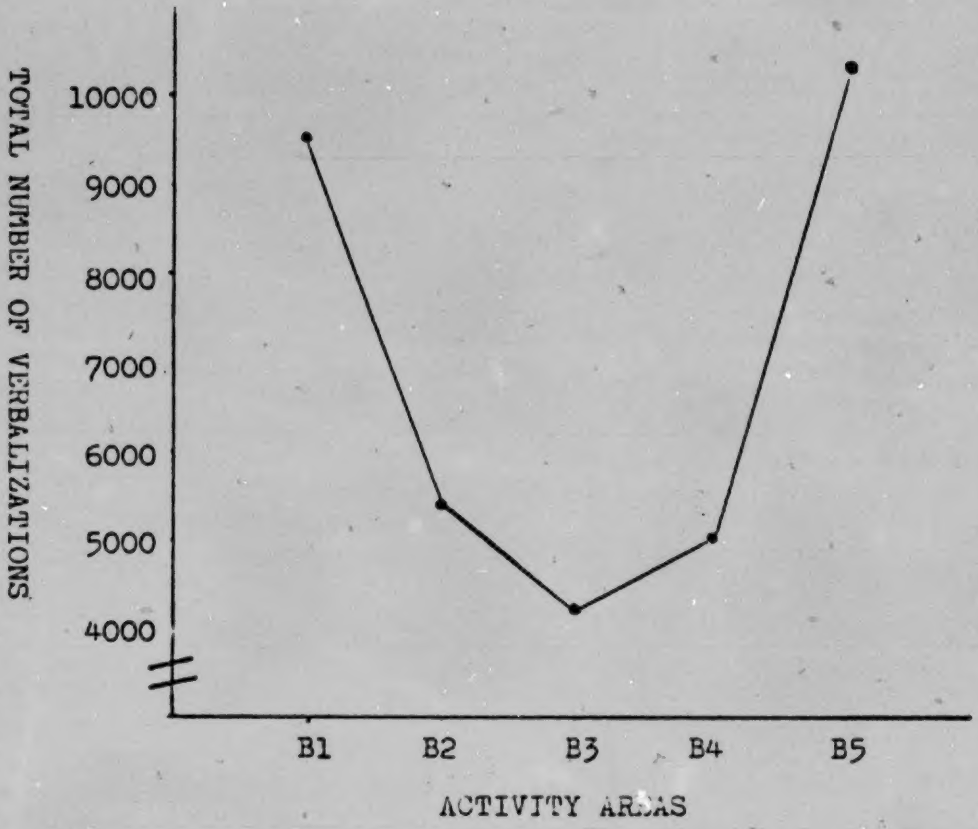
homes. Therefore, if the children were indoors and could not use the free play activity area, there would be a lower level of total verbalizations for that day in all the centers and homes. This occurred because the subjects had to spend more time in the blocks, art, and cognitive games areas, which were significantly lower than the free play and dramatic play areas in eliciting verbalizations. Table 3 shows how activity area were significantly different in the total verbalizations produced by subjects ($F=5.47$, $df=4$, $p < .001$).

The other part of the analysis was whether the V1 and V2 verbalizations differed in the Family and Group Day Care Centers, and the Homes. In Table 4, an analysis was done using t-tests to find significant differences between means of V1 and V2 verbalizations produced by

Graph # 16



B1--Free play area

B2--Cognitive games area

B3--Blocks area

B4--Art area

B5--Dramatic play area

subjects in the Family and Group Day Care Centers. Table 4 shows that significantly more V2 verbalizations were made by subjects than V1 verbalizations in the Family Day Care Centers ($t=4.43$, $p<.05$).

Insert Table 4

Also, there were significantly more V2 verbalizations made by subjects in the Family Day Care Centers than V2 verbalizations made by subjects in the Group Day Care Centers ($t=5.67$, $p<.05$). However, there were significantly more V1 and V2 verbalizations made by subjects in the Group Day Care Centers ($t=3.61$, $p<.10$). These results explain how the interaction of centers and activity areas were significant. The Family Day Care Centers had significantly more verbalizations than the Group Day Care Centers because of the greater number of V2 verbalizations produced by the subjects. Therefore, the subjects that were in a particular activity area in the Family Day Care Centers produced more verbalizations than the subjects in an equivalent activity area in the Group Day Care Centers, because signigicantly more V2 verbalizations

Table 4

Comparison of V2 and V1 verbalizations produced by subjects in Family and Group Day Care Centers using t-test for differences between means

	V2	V1	t-diff[7]
Family Day Care Centers	7364	4551	4.43**
Group Day Care Centers	3812	5783	3.61*
t-diff[7]	5.67**	3.01*	

* $p < .10$
** $p < .05$

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7 Hays, William L., Statistics for Psychologists, Holt, Rinehart, and Winston, New York, 1963, pps 320-322. T-distribution to test hypotheses about differences

were produced by the subjects in the Family Day Care Centers. Table 3 shows how the interaction of activity areas and centers were significantly different in the total verbalizations produced by subjects ($F=2.69$, $df=8$, $p < .01$).

DISCUSSION

From previous pilot studies (Fiene, 1972a,b) it was suggested that children verbalize at different levels of complexity and at different rates when they are in different activity areas. This study has clearly demonstrated that children verbalize at different levels and complexities when experiencing different types of custodial environments (i.e. Family Day Care Center, Home environment, and Group Day Care Center) as well as supporting the previous finding. The interaction of activity areas with centers was also significant. For example, the dramatic play area elicits more complex verbalizations in the Family Day Care Center than in the Group Day Care Center. The Family Day Care Center appears to be producing an environment that is more conducive for communicating verbally at the child's level than the Group Day Care Center. The child is verbalizing more and at a more sophisticated level in all activity areas in the Family Day Care Center.

Keeping the sample used in this study in mind, some of these statements should be qualified. The Family and Group Day Care Centers that were part of this sample should be considered above average in the staff educational background (90% of the teachers in the centers had B.A.'s or above), the equipment used was of a high quality (SRA, Montessori), and the centers themselves were spacious and attractive. These centers were chosen because of willingness of the directors of the centers to conduct research. In the Family Day Care Centers observed, generally there was a closer child-adult inter-personal relationship. In the Group Day Care Center, the adults had more of a condescending attitude towards the children and usually felt the children were more unruly than the reports I received from the adults in the Family Day Care Centers about their children.

These attitudes of the adults (teachers) in the two day care settings seemed to be influencing the types of verbalizations the adults and children were having. The teachers in the Group Day Care Center were usually engaged in a question and answer form of verbalizing with the children, and in the form of commands given to the children. The children need only respond with a couple of words when conversing with the teachers. The teachers, because of the size of the group in the Group Day Care Centers, had relatively little time to spend verbalizing with individual children. The adults (teachers) in the Family Day Care Centers, because of the small size of the center, had more time to spend verbalizing with individual children in "meaningful" passages for greater durations.

An implication is that the particular environments influenced the character of the adult-child verbal interactions which in the case of the Family Day Care Centers caused more verbalizations to be elicited by the subjects. These verbalizations being at a more sophisticated level. In the Group Day Care Centers, the teachers and children just were not verbalizing as much because of pressures incurred by the curriculum, parent expectations of children's progress, and sheer number of children (solutions will be discussed later).

Returning to the fact that children verbalize at different levels of complexity and at different rates when experiencing different activity areas, there are several implications which must be discussed. In reviewing the data [redacted] of Graph #16 it is evident that all the activity areas located in the Family Day Care Centers have higher verbalizations levels because of the greater number of V2 verbalizations produced by the subjects. This explains why the verbalization levels are different in the activity areas across the centers; it does not explain how the activity areas within a particular center differs in verbalization levels. A possible explanation is that the play patterns engaged in by Ss in the various activity areas are more conducive or facilitative to verbalizing. For instance, the play patterns in the Dramatic Play area were very conducive to children verbalizing. The children both in the Family and Group Day Care Settings engaged in a great deal of social behavior (playing house, doctor) which requires a great deal of verbalizing for it to be successful. In contrast, the blocks area had relatively little verbalizing done in both the Family and Group Day Care Settings. The nature of this activity area, where each child works alone with relatively little social interaction, is that little verbalizing occurs. The cognitive games and art areas were similar to the blocks area with little verbalizing because the children were engaged in an activity by themselves. The free play area was more like the dramatic play area because of the availability to socialize and communicate each others needs.

The interaction of activity areas and centers seemed to occur because the subjects in the Family Day Care Centers produced more V2 verbalizations across all activity areas; and the subjects were eliciting different rates of verbalizations in the activity areas. For example, the dramatic play area is a high elicitor of verbalizations. This activity area in a Family Day Care Center, which appears to be a more conducive environment for verbalizing, will elicit a great number of verbalizations from its subjects. In contrast, a blocks area which was a low elicitor of verbalizations, placed within a Group Day Care Center, which seems not to be as conducive an environment for verbalizing, will elicit very few verbalizations.

This is an important point because when a high veral producing activity area (e.g. dramatic play) is within a Family Day Care Center, the great number of verbalizations produced by its subjects causes the high output of V2 verbalizations. The data clearly indicates that learning environments which are facilitative in producing verbalizations (e.g. dramatic play, and a Family Day Care Center) will have a more likely chance of producing sophisticated sentence structures (V2 verbalizations). When a low verbal producing activity area (e.g.blocks) is within a Group Day Care Center, the smaller number of verbalizations produced by its subjects causes the low output of V2 verbalizations. The data indicates that learning environments which are not facilitative in producing verbalizations (e.g. blocks and a Group Day Care Center) will not produce many sophisticated sentence structures (V2 verbalizations). It appears that volume of verbalizations produced correlates highly with the complexity of verbalizations produced. The greater the volume, the higher the complexity.

In looking at all the data for the interaction of centers and activity areas, it appears that the centers have more of an effect on the verbalizations produced in the activity areas, it appears that the centers have more of an effect on the verbalizations produced in the activity areas. The reason for this is that centers have biases (e.g. teacher preference for cognitive development) that are going to affect all the activity areas. The activity areas are made to fit the biases of the center rather than the center fitting the activity areas.

If one is to assume that a high level of verbalizations is a goal of pre-school learning environments, then how can Group Day Care Centers be more of a facilitator of producing verbalizations? Certainly the size of many Group Day Care Centers can be decreased which will permit a lower adult to child ratio. Definitely not more than five children to one adult should be maintained in order for this to be effective. This would give the adult more time to spend verbalizing with individual children. Another method to increase verbalizations is to alter play patterns. For instance, in a cognitive games area, which is not a very high elicitor of verbalizations, when a child is partaking in an activity an adult could begin talking to the child about what he/she is playing with rather than leaving the child to play by himself. Also, in very large centers, where it is not feasible to cut down its enrollment, another form of altering play patterns could be used. With older children, four and five years old, a contingency system (can be modified for younger children) can be used where a child must verbalize with adults in going from activity area to activity area. (the adults are stationed at every activity area). The child is only rewarded for the production of sophisticated sentence structures. These suggestions may work in some day care learning environments, but definitely not in all. Only an individually prescribed curriculum-geared for the needs of each individual center will be appropriate.

This study analyzes the relationship between movement and language production in a day care setting.

In a paper (Fiene, 1971) it was pointed out that relatively little research has been done on the "Traditional Nursery School" program (Evans, 1971). In looking at most programs (experimental) such as Bereiter-Engelmann (1969), Karnes (1969) and Palmer (1969) there is a great body of research that goes along with it. However, in "Traditional Nursery School" settings, the program exists but without the great body of research. It was also pointed out that Family Day Care Homes suffer the same malady. When one considers the fact that 85% of the children in the United States (DCCDCA, 1971) are enrolled in the above two centers ("Traditional Nursery Schools" and Family Day Care Homes) one becomes somewhat alarmed.

Besides the fact that 85% of the children in the nation are either in a Traditional Nursery School or a Family Day Care Center, the other reason for investigating these programs is that they are about the closest we can be removed from an uncontrolled, non-laboratory setting. Also the programs do not vary much across the nation (Fiene, 1971). A Traditional Nursery School emphasizes the whole child using art, music, cognitive games, dramatic play, free play and blocks to help develop the child. Family Day Care Settings are basically custodial in their caring of children. Both types of programs have similar emphases in supplying the child with an environment as comfortable and liking as the child's own home.

In this study, two variables were looked at: (1) the time spent verbalizing by Ss to other children in a group (Traditional Nursery School) and Family Day Care Home (Center); (2) time was also taken on the movement of each child between activity areas. Time was kept by two observers using stop-watches on all the Ss. There has been research done by the Brandts' (1970) which indicates that there is a causal or at least a slight correlation between movement and the other types of development (language, cognition, etc.).

My hypotheses were: (1) there would be more verbalizations and more movement in the Family Day Care Setting; (2) there would be less movement and less verbalizations in the Group Day Care Settings.

METHOD

Subjects:

Ten subjects, five males and five females between the ages of 28 and 54 months. All were white children attending day care centers all day (Traditional Nursery School curriculum stressed). Three males and two females were randomly selected from a Family Day Care Center. The same was done in a Group Day Care Center. The population of the Family Day Care Center was 10. The population of the Group Day Care Center was 45.

The Group and Family Day Care Centers were matched for a Traditional Nursery Settings emphasizing essentially custodial care of children.

Materials:

Each observer had two stop watches to record the time spent in movement and verbalizing.

Setting:

The two centers were in the Islip Township located in the South-Central protion of Long Island, New York. These were low to middle income areas.

In both centers there were well-defined activity areas. These activity areas were a cognitive games area, a blocks area, an art area, a free play area, and a dramatic play area. Activity areas were delineated on the following criteria: Blocks area--An area that contained any type of building toys (erector sets, unit blocks, hollow blocks); art area--contained crayons, coloring blocks. easils, collage materials (felt, paper, scissors); cognitive games--contained puzzles, manipulative small muscle toys; dramatic play area--contained dolls, carriages, dress-up materials; free play area--contained outdoor equipment and large muscle equipment. Activity areas were broken off from each other by waist high (adult height shelves or toy cabinets). In both centers, all activity areas were emphasized equally (i.e. children spent an equal amount of time in all areas).

Recordings:

The trained observers would only start the stop-watch for verbalizations (in their right hand) if the child were actually in a particular activity area engaging in an activity when verbalizing (i.e. child had to be playing--picking up a toy, reading a book, dressing up, pushing a toy, etc.). If the child were verbalizing but not in an activity area, or moving from area to area, the stop-watch for verbalizations was not started. The observers would start the stop-watch for movement located in their left-hand if the child were moving from activity area to activity area.

Procedure:

The observers who did the recordings were pre-school teachers. One male, one female. Training of observers was done week in advance to the actual collecting of the data for the study.

The observers were located on the periphery of the room, they were free to move along the periphery of the centers in order to get a better view of the children. The observers spent 20 minutes in the morning between 10:00-10:30 in the centers. These times were selected for the staff interacted with the children as little as possible during this time. There was no large group play, the children were engaged in solitary play with their peers.

The observers would spend their 20 minutes of each day as follows: They would enter one of the centers, synchronize their stop-watches so that each observer started observing at precisely the same time. Only the timings were kept on each of the ten Ss as they berbalized and moved within the centers. Forty minutes of observations were obtained for each S. There was a total of 400 minutes of observations for all the Ss. The observations were done over a two week period. Four 10 minute sessions per subject.

Reliability was calculated for the two observers for each 10 minute observation session. Reliability was calculated by the observers where if they were within 30 seconds of each other for their timings obtained on their stop-watches, the observation was considered valid. This averaged out to about .91 as a reliability check for the observers for each session.

RESULTS AND DISCUSSION

The Ss showed a significant trend in the Family Day Care Center to do more moving and verbalizing within activity areas and less movement between areas, than the Ss in the Group Day Care Center. ($t = 1.76$, $p < .10$; $t = 2.03$, $p < .10$). There was no significant difference between time spent in movement in the activity areas and verbalizing in activity areas in either the Group or Family Day Care Centers. Although there was less movement between activity areas in the Family Day Care Center than the Group Day Care Center this did not prove significant, however a trend did exist there. (See Graph #17.)

Insert Graph #17

Graph # 17

Total Number of Minutes Recorded by Observers of Ss either moving or Verbalizing in the Family and Group Day Care Center

	Family Day Care Centers	Group Day Care Centers	T-Tests
Movement Between Act. Areas	196 minutes	250 minutes	——
Movement Within Act. Areas	380 minutes	170 minutes	1.76*
Verbalizing in Act. Areas	498 minutes	210 minutes	2.10*
t-tests	——	——	

* $p < .10$

In analyzing the data in Graph#17 it is evident that the Ss in the Family Day Care Center were highly mobile and flexible within their various activity areas. These Ss were also verbalizing at a higher level with each other in each of the activity areas. The level of distraction was low. This is signified by the low level of time spent in moving from activity area to activity area. The Ss in the Group Day Care Center appeared to be greatly distracted or at least more distracted than the Ss in the Family Day Care Center. This is shown by the higher level of time spent in moving from activity area to activity area.

This study shows some trends which were produced by the above custodial day care environments. The Family Day Care Center appears to be providing an environment which allows more time for verbalizing. The Group Day Care Center appears not to have as effective an environment for producing verbalizations. Of course I am not generalizing these statements to the multitude of centers that exist before substantial data can be obtained.

A question which still has to be answered concerns the quality of care provided by Family and Group Day Care Centers. This has to be answered more fully using appropriate criteria. If one uses the number of distractions or the amount of verbalizing with the less distractions, than which environment will provide the quality of care?

This question of verbalizations has to be analyzed more fully in looking at the nature of these verbalizations. Distractions can be good or bad depending on their timing. However, the amount of verbalizing would appear to be positively correlated with intellectual development. The more verbal a child, the more intelligent, the more he/she communicates to his/her peers (Gordon, 1972).

This study was the first in the series of analyzing the child's ecology by specifically analyzing verbal interactions between Ss in Family and Group day care.

There has been great de-bate over what types of verbal behavior are characteristic of quality care. Ira Gordon (1972) has pointed out that high intellective potential is readily observable by the volume of time peers spend talking to each other. If we accept this premise than we would state that a quality program would have a great deal of verbalizing between peers. Another facet of this argusment is whether the volume of verbalizations is more important than the quality of verbalizations. Is complexity more important than sheer volume?

Two assumptions are being made in this study: (1) Complexity of verbalizations is more important than quantity of verbalizations; (2) the quanlity of care is directly related to the occurrence of the complexity of verbalizations. The higher the occurrence of complex verbalizations the more desireable the care.

It has been shown that trends towards more verbalizing in a Family Day Care Center than in a Group Day Care Center have been established (Fiene, 1972). However, one aspect of the nature of this volume of verbalizations is the character of these verbalizations. Are they long or short sentences? Shere volume isn't as important as the complexity or sophistication of these sentences. Are the subjects within the Family Day Care Centers producing just more sentences or are they producing more complex sentences?

I am predicting that: (1) Ss in the Family Day Care Center will produce more complex verbalizations; (2) Ss in the Group Day Care Center will produce more simple verbalizations than complex verbalizations

Subjects:

Ten Ss, five males and five females between the ages of 28 and 54 months. All were white children attending day care centers full time (8 hrs/day). Three males and two females were randomly selected from a family day care center. The same was done in a Group day care center. The Group and Family day care centers were matched for a traditional nursery settings emphasizing essentially custodial care of children.

Materials:

Each observer had two stop watches to record the time spent in N-V as versus N-V-A sentences or verbalizations.

The two centers were in the Islip township located in the South-Central portion of Long Island, New York. These were low to middle income areas.

In both centers there were well_defined activity areas. These activity areas were a cognitive games area, a blocks area, an art area, a free play area, and a dramatic play area. Activity areas were delineated on the following criteria: Blocks area--an area that contained any type of building toys (erector sets, unit blocks, hollow blocks); art area--contained crayons, coloring blocks, easels, collage materials (felt, paper, scissors); cognitive games area--contained puzzles, manipulative small muscle toys; dramatic play area--contained dolls, carriages, dress-up materials; free play area--contained outdoor equipment and large muscle equipment. Activity areas were broken off from each other by waist high (adult height shelves or top cabinets). In both centers, all activity areas were emphasized equally (i.e. children spent an equal amount of time in all areas).

The verbalizations were recorded as either N-V (noun-verb or simple verbalizations) or N-V-A (noun-verb-adverb or noun or complex verbalizations). The stop-watches would be started simultaneously for the observer. If the verbalizations were a simple verbalizations, the observer would stop one stop watch at the completion of the verbalization and record the time verbalizing. If the verbalizations were a complex verbalizations, the observer would let both stop-watches run until the completion of the verbalizations, then record the time of the complex verbalization.

The observers who did the recordings were preschool teachers. One male, one female. Training of observers was done one week in advance to the actually collecting of the data for the study.

The observers were located on the periphery of the room, they were free to move along the periphery of the centers in order to get a better view of the children and to hear the children better for verbalizations. The observers spent 20 minutes in the morning between 10:00-10:30 in the centers. These times were selected for the staff interacted with the children as little as possible during this time. There was no large group play, the children were engaged in solitary play or group play without adult intervention.

The observers would spend their 20 minutes of each day as follows: they would enter one of the centers, synchronize their stop watches so that each observer started observing at precisely the same time. Only the timings were kept on each of the ten Ss as they verbalized within the centers. Forty minutes of observations were obtained for each S. There was a total of 400 minutes of observations for all Ss. The observations were done over a two week period. Four ten minute sessions were taken on each subject.

Reliability was calculated for the two observers for each ten minute observation session. Reliability was calculated by the observers where if they were within 30 seconds of each other for their timings obtained on their stop-watches, the observation was considered valid. This averaged out to a .95 reliability check for each session.

As can be seen in Graph#18, the Ss were producing more N-V-A (complex sentence structures) in the Family Day Care Centers ($t=1.96$, $p<.10$). In the Group Day Care Center (see Graph #19, the Ss produced more N-V than N-V-A sentence structures ($t-2.01$, $p<.10$).

Insert Graph # 18

There were some inherent problems with this study which probably caused the low significance levels. The manner of recording times through the use of the stop-watches was difficult and cumbersome. Trying to coordinate

Insert Graph # 19

Graph # 18

t-tests computed on number of verbalizations produced by Ss in Family Day Care Centers on N-V and N-V-A sentence structures

	Number of Verbalizations
N-V	1810
N-V-A	2026
t-test	1.96*

* $p < .10$

Graph # 19

t-tests computed on Number of Verbalizations produced by Ss in Group Day Care Centers on N-V and N-V-A sentence structures

	Number of Verbalizations
N-V	1936
N-V-A	1677
t-test	2.01*

* $p < .10$

your hands for simple as versus complex verbalizations made it extremely difficult on the observers. The problem of anticipation in trying to figure out when a child was talking and just moving his lips made for difficulties on observations.

In future studies, I would recommend counting the frequency that a verbalization occurred rather than its duration. This would provide a more valid means of recording.

This concludes the construction of the theoretical base for EMIS. The following three chapters are concerned with what EMIS is doing right now: How it works and more importantly what it has produced.

CHAPTER 3

DEMOGRAPHIC DATA, REGIONAL MODEL, BASELINE

In looking at the demographic data it is self-evident that child development services, in particular, day care services are direly needed in the State. Here are some summary statistics. There are presently 455, 244 children under five years of age. Of that figure, 113, 017 children are in some form of child care arrangement. Economically, there are 302, 470 families who make under $5,000/year; 631, 798 make less than $10,000/year.

Presently, there are 67,678 women in the labor force with children under five. There are an additional 337,202 women with children under five, and how many of these women would like to return to work but can't because they don't have child care provisions?

These figures are definitely a strong indicator of the need or at least the potential need for child care services in the state.

PENNSYLVANIA COUNTIES	Total Population--1970 Census							Annual Family Income--1969	
	Total	White	Black	Other	Male	Female	Children Under 5	0-$4,999	$5,000-$9,999
1.Allegheny	1,605,016	1,455,306	144,545	5,165	762,488	842,528	116,350	63,165	139,773
2.Armstrong	75,590	74,763	754	73	36,620	38,970	5,798	8,283	9,629
3.Beaver	208,418	196,482	11,585	351	101,430	106,988	16,008	8,457	21,973
4.Bedford	42,353	42,186	143	24	20,667	21,686	3,632	2,980	4,956
5.Blair	135,356	134,161	981	214	63,911	71,445	10,617	7,752	15,118
6.Bradford	57,962	57,773	64	125	28,237	29,725	5,450	3,158	5,978
7.Butler	127,941	127,296	437	208	62,314	65,627	11,043	5,433	13,474
8.Cambria	186,785	183,102	3,454	229	89,928	96,857	13,941	9,600	19,827
9.Cameron	7,096	7,070	14	12	3,359	3,737	600	246	711
10.Carbon	50,573	50,446	65	62	24,284	26,289	3,775	2,812	6,657
11.Centre	99,267	97,346	1,384	537	52,060	47,207	8,027	4,151	9,720
12.Clarion	38,414	38,327	40	47	18,695	19,719	3,122	2,463	4,300
13.Clearfield	74,619	74,371	148	100	36,182	38,437	6,332	5,193	8,757
14.Clinton	37,721	37,618	45	58	18,343	19,378	2,897	2,048	4,664
15.Columbia	55,114	54,995	112	7	26,475	28,639	4,200	3,014	7,086
16.Crawford	81,342	80,164	1,045	133	39,689	41,653	6,979	4,263	8,529
17.Elk	37,770	37,736	9	25	18,380	19,390	3,626	1,610	4,470
18.Erie	263,654	254,183	8,951	520	127,041	136,613	23,392	10,203	25,739
19.Fayette	154,667	147,806	6,658	203	74,466	80,201	12,388	12,935	17,383
20.Forest	4,926	4,884	1	41	2,461	2,465	361	310	576
21.Fulton	10,776	10,705	57	14	5,363	5,413	990	894	1,303
22.Greene	36,090	35,716	336	38	17,377	18,713	2,690	3,094	3,836
23.Huntingdon	39,108	38,074	996	38	19,365	19,743	3,228	2,673	4,336
24.Indiana	79,451	78,853	473	125	38,153	41,298	6,306	4,532	8,011
25.Jefferson	43,695	43,643	29	23	20,890	22,805	3,205	3,085	5,264
26.Juniata	16,712	16,699	7	6	8,169	8,543	1,415	1,093	2,052
27.Lackawanna	234,107	232,747	941	419	109,765	124,342	16,414	11,977	27,157
28.Lawrence	107,374	104,455	2,770	149	51,948	55,426	7,942	5,339	15,883
29.Luzerne	342,301	340,008	1,806	487	161,040	181,261	23,612	19,427	39,547
30.Lycoming	113,296	111,738	1,305	253	54,347	58,949	9,256	5,370	12,709
31.McKean	51,915	51,748	53	114	24,826	27,089	4,487	2,874	6,026
32.Mercer	127,175	121,745	5,250	180	62,221	64,954	9,934	5,303	12,942
33.Mifflin	45,268	45,131	93	44	21,501	23,767	4,057	2,637	5,437
34.Monroe	45,422	44,689	616	117	21,752	23,670	3,379	2,179	4,855
35.Montour	16,508	16,427	31	50	7,561	8,947	1,145	788	1,559

Chart #1

PENNSYLVANIA COUNTIES	Total Population--1970 Census							Annual Family Income--1969	
	Total	White	Black	Other	Male	Female	Children Under 5	0-$4,999	$5,000-$9,999
36.Northumberland	99,190	98,985	140	65	46,868	52,322	7,328	6,890	21,284
37.Perry	28,615	28,545	35	35	14,194	14,421	2,410	1,432	3,394
38.Pike	11,818	11,762	27	29	5,731	6,087	828	777	1,270
39.Potter	16,395	16,309	35	51	8,045	8,350	1,465	1,147	1,925
40.Schuylkill	160,089	159,623	309	157	76,195	83,894	11,230	10,841	20,030
41.Snyder	29,269	29,082	157	30	14,458	14,811	2,412	1,447	3,165
42.Somerset	76,037	75,844	112	81	37,058	38,979	6,013	5,307	8,483
43.Sullivan	5,961	5,937	15	9	2,976	2,985	463	448	572
44.Susquehanna	34,344	34,261	39	44	17,003	17,341	3,016	2,079	3,801
45.Tioga	39,691	39,558	71	62	19,249	20,442	3,390	2,358	4,340
46.Union	28,603	27,780	734	89	14,923	13,680	2,106	1,219	2,584
47.Venango	62,353	61,885	393	75	30,122	32,231	4,876	3,171	6,888
48.Warren	47,682	47,548	73	61	23,190	24,492	3,878	2,045	4,760
49.Washington	210,876	202,972	7,662	242	102,370	108,506	15,299	11,030	23,665
50.Wayne	29,581	29,237	318	26	14,804	14,777	2,266	1,988	3,213
51.Westmoreland	376,935	370,261	6,092	582	182,710	194,225	29,867	19,739	40,097
52.Wyoming	19,082	19,033	37	12	9,440	9,642	1,799	1,211	2,090
Total-- 52 Counties	5,930,303	5,707,015	211,447	11,843	2,850,644	3,079,659	455,244	302,470	631,798

Chart # 2

PENNSYLVANIA COUNTIES	Annual Family Income--1959 Husband/Wife Families-1970 Census						Female Headed Families-1970 Census		
	$10,000-$14,999	$15,000-$24,999	$25,000 or more	Total	Women with children under 6 yrs	Women with children under 6 yrs. and in labor force	Total	Women with children under 6 yrs.	Women with children under 6 yrs. and in labor force
1.Allegheny	119,980	67,121	21,133	352,631	84,819	12,716	49,370	10,234	3,444
2.Armstrong	4,097	1,471	251	17,935	4,350	692	1,684	430	155
3.Beaver	16,704	6,677	1,101	48,800	12,237	2,001	5,029	1,226	445
4.Bedford	2,353	769	284	10,001	2,703	690	938	222	76
5.Blair	8,614	3,112	737	30,635	7,714	2,064	3,826	856	368
6.Bradford	3,781	1,407	257	12,662	3,876	1,098	1,323	380	193
7.Butler	9,115	3,411	589	28,523	8,468	1,412	2,308	505	252
8.Cambria	11,726	4,267	1,016	40,180	9,780	1,553	4,867	964	348
9.Cameron	639	229	42	1,629	454	150	192	54	36
10.Carbon	3,157	985	109	11,884	2,706	721	1,442	213	95
11.Centre	5,244	2,913	759	19,595	6,150	1,816	1,347	368	218
12.Clarion	1,859	735	123	8,381	2,293	441	788	155	56
13.Clearfield	4,006	1,254	231	16,665	4,664	1,058	2,011	496	246
14.Clinton	2,126	702	109	8,634	2,115	700	873	215	103
15.Columbia	1,604	990	213	12,664	3,230	966	1,322	323	189
16.Crawford	5,593	2,104	366	18,343	5,121	1,318	1,733	427	160
17.Elk	2,521	716	128	8,326	2,509	730	719	141	92
18.Erie	18,921	8,066	2,075	57,084	16,391	3,678	6,208	1,716	784
19.Fayette	7,525	2,467	404	34,345	8,662	1,182	4,839	1,212	380
20.Forest	330	109	15	1,164	300	48	57	13	7
21.Fulton	531	169	46	2,539	713	221	267	89	51
22.Greene	1,854	597	83	7,963	1,823	308	1,020	271	111
23.Huntingdon	2,038	618	120	8,548	2,237	636	1,040	282	147
24.Indiana	4,054	1,742	406	17,046	4,823	683	1,573	361	127
25.Jefferson	2,460	775	161	10,113	2,294	550	1,080	220	85
26.Juniata	929	265	31	4,043	1,070	254	289	79	47
27.Lackawanna	14,855	6,027	1,465	50,962	12,104	2,743	8,154	730	260
28.Lawrence	7,450	2,615	494	24,330	5,768	848	2,898	611	198
29.Luzerne	21,795	7,808	2,065	76,283	17,703	4,487	12,148	1,547	691
30.Lycoming	7,820	2,742	575	25,618	6,998	2,067	2,693	736	357
31.McKean	3,519	1,135	229	11,956	3,109	868	1,332	372	138
32.Mercer	9,423	3,781	754	28,590	7,127	1,282	2,642	747	325
33.Mifflin	2,989	971	203	10,685	3,107	730	1,018	313	144
34.Monroe	3,303	1,352	251	10,471	2,631	751	1,043	260	135
35.Montour	840	323	89	3,250	836	266	308	91	65

Chart # 3

PENNSYLVANIA COUNTIES	Annual Family Income--1969			Husband/Wife Families-1970 Census			Female Headed Families-1970 Census		
	$10,000-$14,999	$15,000-$24,999	$25,000 or more	Total	Women with children under 6 yrs.	Women with children under 6 yrs. and in labor force	Total	Women with children under 6 yrs.	Women with children under 6 yrs. and in labor force
36.Northumberland	5,550	1,411	270	23,287	5,653	1,641	3,196	613	300
37.Perry	1,746	672	155	6,806	1,959	585	535	112	80
38.Pike	799	380	76	3,014	640	157	175	29	16
39.Potter	875	256	76	3,652	1,213	347	319	65	26
40.Schuylkill	9,186	2,491	453	36,542	8,584	1,941	5,343	882	396
41.Snyder	1,657	580	103	6,219	1,734	568	490	149	90
42.Somerset	4,036	1,741	414	17,679	4,532	844	1,792	306	103
43.Sullivan	338	128	28	1,427	367	84	94	26	10
44.Susquehanna	2,128	768	166	7,779	2,272	612	720	154	76
45.Tioga	2,107	833	136	8,713	2,580	663	714	240	118
46.Union	1,610	737	128	5,697	1,537	428	392	141	94
47.Venango	3,720	1,351	215	13,694	3,631	685	1,374	269	83
48.Warren	3,563	1,304	318	10,564	3,033	919	1,017	308	159
49.Washington	14,286	5,749	1,046	49,187	12,125	1,951	5,300	1,189	379
50.Wayne	1,566	557	190	6,617	1,762	485	667	102	31
51.Westmoreland	29,046	12,176	2,132	88,811	23,456	3,724	8,611	1,609	606
52.Wyoming	1,238	394	60	4,457	1,339	316	384	63	26
Total-- 52 Counties	397,206	171,953	42,885	1,326,633	337,202	67,678	159,504	33,116	13,121

Chart # 4

PENNSYLVANIA COUNTIES	Nursery School Enrollment 1970 Census			Kindergarten Enrollment 1970 Census			Day Care Program Enrollment--Age 0-5 Title IV-A--1974-75		Not Title IV-A--1973
	Total	Public	Private	Total	Public	Private	Total	Title IV-A	Not Title IV-A
1.Allegheny	7,208	2,529	4,679	22,515	18,597	3,918	3,814	1,800	2,014
2.Armstrong	84	67	17	1,075	1,062	13	213	45	168
3.Beaver	483	270	213	3,036	2,954	82	240	45	195
4.Bedford	28	22	6	199	111	88	41	17	24
5.Blair	264	104	160	1,988	1,930	58	272	130	142
6.Bradford	102	50	52	1,070	1,064	6	231	213	18
7.Butler	123	64	59	1,275	1,038	237	112	35	77
8.Cambria	255	90	165	2,423	2,205	218	315	200	115
9.Cameron	0	0	0	95	95	0	0	0	0
10.Carbon	54	50	4	708	680	28	16	16	0
11.Centre	500	185	315	1,667	1,667	0	149	120	29
12.Clarion	21	0	21	307	296	11	53	0	53
13.Clearfield	32	32	0	1,037	1,037	0	0	0	0
14.Clinton	105	55	50	534	516	18	123	20	103
15.Columbia	36	22	14	572	572	0	120	50	70
16.Crawford	109	62	47	1,244	1,237	7	319	185	134
17.Elk	5	0	5	673	654	19	0	0	0
18.Erie	901	332	569	4,328	4,146	182	822	430	392
19.Fayette	188	115	73	2,648	2,579	69	135	85	50
20.Forest	0	0	0	55	55	0	0	0	0
21.Fulton	7	7	0	75	68	7	115	57	58
22.Greene	43	43	0	302	302	0	206	125	81
23.Huntingdon	61	34	27	626	620	6	125	57	68
24.Indiana	127	84	43	863	854	9	301	130	171
25.Jefferson	10	10	0	624	624	0	31	0	31
26.Juniata	0	0	0	265	265	0	12	0	12
27.Lackawanna	467	202	265	3,544	3,309	235	953	848	105
28.Lawrence	124	86	38	1,201	1,030	171	27	0	27
29.Luzerne	425	215	210	4,494	4,189	305	404	357	47
30.Lycoming	198	171	27	2,001	1,969	32	89	16	73
31.McKean	41	15	26	903	895	8	54	0	54
32.Mercer	357	162	195	1,937	1,782	155	135	80	55
33.Mifflin	54	39	15	803	775	28	50	50	0
34.Monroe	70	42	28	888	882	6	75	0	75
35.Montour	7	7	0	167	167	0	26	6	20

Chart # 5

PENNSYLVANIA COUNTIES	Nursery School Enrollment 1970 Census			Kindergarten Enrollment 1970 Census			Day Care Program Enrollment--Age 0-5 Title IV-A--1974-75 Not Title IV-A--1973		
	Total	Public	Private	Total	Public	Private	Total	Title IV-A	Not Title IV-A
36.Northumberland	61	34	27	1,454	1,426	28	95	40	55
37.Perry	0	0	0	72	38	34	14	0	14
38.Pike	34	3	31	134	134	0	0	0	0
39.Potter	5	0	5	169	169	0	0	0	0
40.Schuylkill	118	86	32	2,100	2,016	84	288	255	33
41.Snyder	23	14	9	359	359	0	59	20	39
42.Somerset	119	89	30	887	866	21	215	105	110
43.Sullivan	0	0	0	72	72	0	65	43	22
44.Susquehanna	29	21	8	189	96	93	23	23	0
45.Tioga	67	36	31	498	492	6	161	148	13
46.Union	60	54	6	332	332	0	60	0	60
47.Venango	129	67	62	730	695	35	287	160	127
48.Warren	78	30	48	733	704	29	78	0	78
49.Washington	432	277	155	2,745	2,686	59	395	105	290
50.Wayne	67	3	64	468	462	6	83	4	79
51.Westmoreland	767	255	512	4,797	4,043	754	312	39	273
52.Wyoming	69	43	26	192	192	0	366	360	6
Total-- 52 Counties	14,547	6,178	8,369	82,073	75,008	7,065	12,005	6,419	5,586

Chart # 6

PENNSYLVANIA COUNTIES	Day Care Program Enrollment--Age 0-5 1973 Infants and Toddlers Total	Title IV -A	Not Title IV-A	Preschoolers Total	Title IV -A	Not Title IV-A	Homes	Centers	Head Start	Other
1.Allegheny	239	55	184	3,687	1,857	1,830	465	1,119	1,020	1,322
2.Armstrong	42	0	42	126	0	126	0	108	60	0
3.Beaver	12	0	12	183	0	183	20	99	76	0
4.Bedford	6	0	6	18	0	18	10	14	0	0
5.Blair	28	2	26	214	98	116	42	107	50	43
6.Bradford	2	0	2	116	100	16	4	114	91	0
7.Butler	6	0	6	73	2	71	6	73	0	0
8.Cambria	10	4	6	131	22	109	4	0	29	26
9.Cameron	0	0	0	0	0	0	0	0	0	0
10.Carbon	0	0	0	42	42	0	0	16	17	26
11.Centre	6	0	6	45	22	23	16	59	2	21
12.Clarion	0	0	0	57	4	53	0	0	53	4
13.Clearfield	0	0	0	0	0	0	0	0	0	0
14.Clinton	4	2	2	119	18	101	8	20	95	0
15.Columbia	1	0	1	71	2	69	31	41	0	0
16.Crawford	0	0	0	144	10	134	0	48	86	10
17.Elk	0	0	0	0	0	0	0	0	0	0
18.Erie	15	0	15	643	266	377	13	503	42	136
19.Fayette	0	0	0	52	2	50	2	50	0	0
20.Forest	0	0	0	0	0	0	0	0	0	0
21.Fulton	10	0	10	48	0	48	0	44	14	0
22.Greene	0	0	0	109	27	81	0	40	68	0
23.Huntingdon	4	4	0	92	24	68	0	46	46	4
24.Indiana	26	0	26	145	0	145	60	38	77	0
25.Jefferson	0	0	0	31	0	31	0	0	31	0
26.Juniata	2	0	2	10	0	10	0	12	0	0
27.Lackawanna	42	34	8	412	315	97	62	233	148	4
28.Lawrence	16	10	6	48	27	21	0	27	0	37
29.Luzerne	19	7	12	302	267	35	22	297	0	0
30.Lycoming	10	6	4	109	40	69	2	55	32	30
31.McKean	18	2	16	42	4	38	25	29	0	6
32.Mercer	0	0	0	98	43	55	0	69	13	16
33.Mifflin	0	0	0	0	0	0	0	0	0	0
34.Monroe	4	0	4	71	0	71	25	50	0	0
35.Montour	2	0	2	24	6	18	26	0	0	0

Chart # 7

PENNSYLVANIA COUNTIES	Day Care Program Enrollment--Age 0-5 1973									
	Infants and Toddlers			Preschoolers						
	Total	Title IV -A	Not Title IV-A	Total	Title IV -A	Not Title IV-A	Homes	Centers	Head Start	Other
36.Northumberland	6	2	4	88	37	51	14	80	32	0
37.Perry	4	0	4	10	0	10	14	0	0	0
38.Pike	0	0	0	0	0	0	0	0	0	0
39.Potter	0	0	0	0	0	0	0	0	0	0
40.Schuylkill	13	7	6	106	79	27	14	92	13	0
41.Snyder	4	0	4	35	0	35	0	39	50	0
42.Somerset	0	0	0	112	2	110	6	56	0	0
43.Sullivan	22	2	20	32	30	2	24	30	0	0
44.Susquehanna	0	0	0	0	0	0	0	0	0	0
45.Tioga	0	0	0	81	68	13	0	49	0	32
46.Union	2	0	2	58	0	58	0	8	52	0
47.Venango	16	0	16	125	14	111	44	37	60	0
48.Warren	2	0	2	76	0	76	0	0	78	0
49.Washington	12	0	12	314	36	278	8	178	104	36
50.Wayne	7	0	7	75	4	71	12	69	0	0
51.Westmoreland	12	0	12	285	24	261	14	83	176	24
52.Wyoming	0	0	0	6	0	6	6	0	0	0
Total-- 52 Counties	624	137	487	8,664	3,492	5,172	999	4,032	2,615	1,777

Chart # 8

SOURCES

1. Internal Memorandum on Contracts for Day Care Programs. Pennsylvania Department of Public Welfare. Fiscal Year 1974-1975.

2. Schriber,Peter E. and Cohen,Allan S. "The Management Information System: Application in Day Care Program Assessment." CHSD Report No. 29. College of Human Development, Pennsylvania State University. University Park, Pennsylvania. June, 1973.

3. U.S. Bureau of the Census. 1970 Decennial Census. General Population Charateristics for Pennsylvania.

ANNUAL REPORT*

The open nature of the Appalachian code has provided for easy adaptation in each of the thirteen states. Pennsylvania has chosen to fund a wide variety of programs in the Appalachian Child Development Program which employ several models for delivery of comprehensive services. The following list includes all services provided directly by programs funded by Section 202 of the Appalachian Code, specifically in the Child Development family:

- Information and Referral Services
- Prenatal Care
  - Medical, Educational, Social, Nutrition and Delivery
- Postnatal Care for Mothers
  - Medical, Educational, Social Outreach Services, Nutrition
- Sickle Cell Anemia Screening
  - Mothers and Children
- Pediatric Health Services
  - Medical Screening and Treatment
  - Speech, Hearing and Vision Screening
  - Infant Stimulation
  - Dental Screening and Treatment
- Parent Education and Pre-Birth Classes
- Special Education for Mentally and Physically Handicapped Children
- Center Day Care
- Family Day Care
- Home Visitors in Early Childhood Education
- Training and Education
  - High School Preparatory Courses
  - College Level Courses
  - On the Job Training
  - Referral to Competency Certification

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* This report was taken from the 1974-75 ARC report for the Governor's Office.

The service network includes such resources as:

Local 4-C Committees (Community Coordinated Child Care

202 Health Planning Councils

Local Development Districts

314B Comprehensive Health Planning Agencies

For Fiscal Year 1974-1975, the following clusters of services are budgeted to provide comprehensive services to the specified number of consumers:

Screening and Outreach Services

(Project Name)	(Children/Families)
Northern Tier CAA Early Childhood Project	350
Communications Screening of Preschool Children	7,200
High Risk Project of Blair Home Nursing Agency	600
Nurse Mid Wifery Program of Maternal Health Agency of Northeast Pennsylvania	800
Altoona Hospital Social Services Project	8,090
Bedford 4-C Information and Referral Project	1,037
	18,077

Comprehensive Day Care, Family Day Care, and Infant-Toddler Care

(Project Name)	(Children Served)
Children's Services of Tioga County	125
Bradford County Child Development Program	120
Sullivan County Child Development Program	48
Columbia County Day Care, Inc.	155
Carbon County Child Development Program	60
Luzerne Infant-Toddler Program	30
Mifflin County Child Development Center	125
Huntingdon County Model Child Development Program	63
Blair County Area Day Care	78
Cambria County Child Development Center	200
Northview Heights Infant Care Project	30
Allegheny Ed.-Med. Center Infant Care Project	20
Schuylkill County Child Development Program	90
Burrell Township Renovation (Parent Child Center)	30
Blair County Area Day Care Expansion	60
Fulton County Child Development Program	84
Luzerne County Teen Aged Parents Program	17
	1,335

Family Planning Services

(Project Name)	(Women Served)
Family Planning of Western Pennsylvania	3,800
Huntingdon-Bedford Family Planning	1,300
Columbia-Montour Family Planning	500
Somerset County Family Planning	200
	5,800

Child Development services in the Commonwealth are provided through State agencies and regional mechanisms. Only the Appalachian Child Development Projects receive state, regional and local review by interagency committees with consumer input through local 4-C (Community Coordinated Child Care) Committees. Specific local projects have successfully demonstrated the feasibility and practicality of providing comprehensive services through a single entry way approach. The Cambria County Child Development Program, for example, demonstrates this kind of approach by uniting a variety of services into one facility in a remote area of the county.

By the nature of Pennsylvania's large geographic span and mountainous terrain, regionalization is an important concept in delivering any services to its residents. State, regional and local bodies need to be established for the purpose of carrying out an effective service delivery system.

The Governor has directed the Commonwealth Child Development Committee, funded in part by ARC, to bring all programs for children together.

The delivery system has been examined more closely through the establishment of an inter-agency task force initiating a state Office of Child Development. It has been found that a re-evaluation of the present system is in order. Through the use of ARC funds, Appalachian services have been expanded and intermingled to best utilize the very limited resources of the regions, while tapping otherwise inaccessible Federal dollars.

Services in areas where Appalachian projects operate, have broadened the scope in terms of comprehensiveness. Agencies engaged in specific services are more aware of the need for coordination and planning as a result of the Appalachian program.

Integrated provider agencies are located in various portions of the Appalachian part of the state. The Cambria County Child Development Center is an

ARC-funded project comprising programs for all needs of children zero to the fifth year including dental care, physical therapy, medical attention, nutrition, education and outreach services.

The United Services Agency of Northeastern Pennsylvania is a unique center housing all public agency-sponsored programs in Wilkes-Barre. An ARC Infant-Toddler Center and Pre-School is located within the center, which this year includes a Teenage Parent Program.

The following provider agencies comprise Pennsylvania's State service network:

Pennsylvania Department of Health
Pennsylvania Department of Education
Pennsylvania Department of Public Welfare
Pennsylvania Department of Community Affairs
Pennsylvania Department of Agriculture

Of this service network, 2% of the funds for State-supported programs is supported by ARC Child Development funds. Of the Federal total, 3% is supported by ARC Child Development funds.

The Commonwealth Child Development Committee is in the process of evaluating the success of the demonstration area's regional service delivery model. This consisted of a regional staff, supplemented with county coordinators to act in a liaison capacity with project directors, assuring coordination of services, training and community input.

Some examples of services integration in the following categories are:

(a) Personnel: In the Altoona Hospital Social Services Project, caseworkers actually participate in the Child Health Conference (well-baby clinic) intake procedure. The caseworker has proven to be a needed addition to the Child Health Program in Blair County.

(b) Facilities: Because the lack of approved structures in Appalachian Pennsylvania is a major problem, day care centers are frequently located in "parent" facilities such as medical centers, hospitals, churches, former school buildings and a united service agency which houses all public agencies in the county.

In most cases, other programmed services operate on the same premises and contribute their valuable and limited space to the Appalachian project.

(c) Existing Services: Because the Child Development programs offer alternative mechanisms to present agency functions, staff are, in most cases, less threatening to the rural family. In turn, these outreach services provide appropriate counseling and referral which maximizes existing programs under-utilized by lack of visibility in the community and transportation difficulties.

Direct results of ARC Child Development Services have included the expansion of many public programs at the local level. Consumer participation has increased public awareness of available services which would not otherwise be tapped.

(d) Funds: One single example of ARC funds utilized to spring forth other Federal dollars is the case of Title IV-A (for family planning and day care services).

In Fiscal Year 1974-75, $1,098,796 of ARC generated $4,286,242 in Title IV-A of the Social Security Act.

Other sources of State and Federal aid include Title XIX for early and periodic screening, Medical Assistance payments, Title I and Title III of Elementary and Secondary Education Act, Flood Recovery Monies for Pennsylvania, Department of Community Affairs funds, the Neighborhood Assistance Act, and State day care appropriations.

Ways the Child Development Program has reduced unnecessary duplication have been:

(a) Manpower: Divided responsibilities for new projects with existing services thus lowering costs for capitol expenditures, administrative overhead and training.

(b) Services: Through State Plan Review, duplicative services in areas of the State can be re-evaluated and dispersed more evenly throughout the rural regions. Regional Advisory bodies (counterparts of the State Committee) review and comment, thus assuring maximum community coordination.

(c) Funds: Through proposal review at the State and regional level, recommendations are made to re-align duplicative funding patterns. Through the 4-C concept (Community Coordinated Child Care), interagency leadership channels limited resources to appropriate sponsors at the local level.

A specific example of this complementarity exists in the Northern Tier Early Childhood Development Program which integrates the current Headstart Program with a new home screening project, pooling existing resources into a "continuity approach" for youngsters of Cameron, McKean, Potter and Elk Counties.

In a renovation project funded this year, a new family planning clinic, well-child conference and parent-child center will be located in one newly refurbished site.

Health reimbursements and sliding fee scales have helped to make the projects self-sufficient by the fourth year of funding, along with appropriate local contributions.

The 0-6 population in Appalachian Pennsylvania is 559,610.

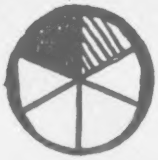
In the target area, during the past twelve months the Appalachian Child Development Program has served:

9,044	children directly	800	families directly
1,237	children by referral	8,090	families by referral
10,281	TOTAL	8,890	TOTAL

One of the basic goals of Appalachian funding has been to provide "seed" monies or catalysts to spring forth other funding mechanisms that would not otherwise be tapped. Much of this can be attributed to the unique matching capability of ARC monies in rural, underdeveloped portions of a state.

In summary, total program dollars spent since the inception of the Appalachian Child Development Program are categorized as:

Appalachian Regional Commission	2.56 million
Other Federal Dollars	4.83 million
Local Public Resources	1.58 million
TOTAL	8.97 million



Striped Area: Local Share
Solid Area: ARC Dollars
White Area: Other Federal Sources

This Federal and State experiment in program planning and operations has led to local capacity building in the area of human development. Children have nutritious meals and quality child care due to the continued development of child care service. Maternal and child health programs are expanding their capabilities through initial investments made real by ARC and the Child Development Program.

Other sources have been discovered to absorb costs in the program's third year of operation through Appalachian staff assistance and program monitoring.

A few examples of resources tapped by local projects in the Appalachian family:

General Revenue Sharing
United Mine Workers of America
Amalgamated Clothing Workers of America
Catholic Diocese

COMMONWEALTH OF PENNSYLVANIA

APPALACHIAN CHILD DEVELOPMENT PROGRAM

SITE LOCATIONS

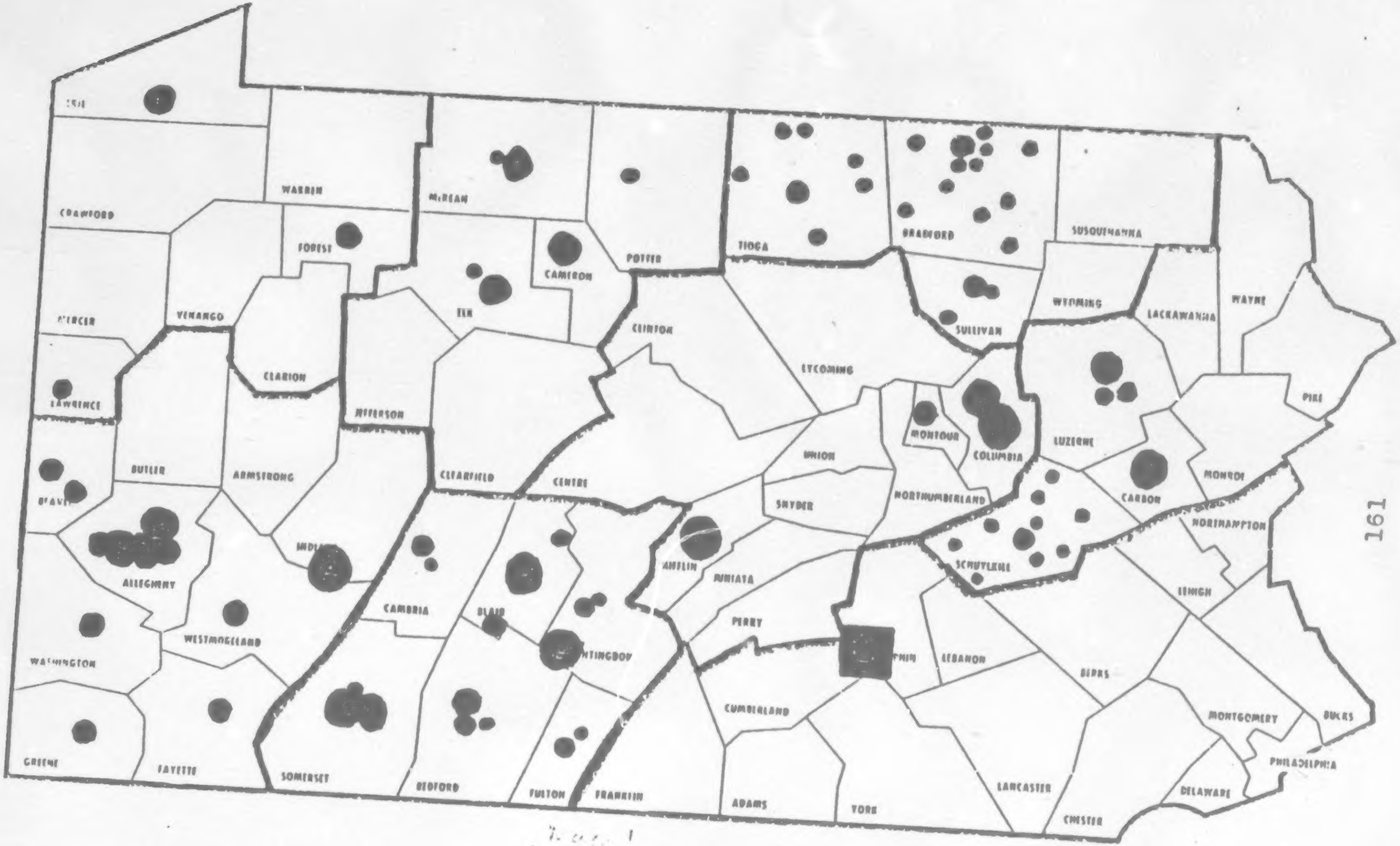

ERIE
CRAWFORD
WARREN
McKEAN
POTTER
TIOGA
BRADFORD
SUSQUEHANNA
FOREST
CAMERON
ELK
MERCER
VENANGO
CLARION
CLINTON
LYCOMING
SULLIVAN
WYOMING
LACKAWANNA
WAYNE
PIKE
LAWRENCE
JEFFERSON
MONTOUR
COLUMBIA
LUZERNE
UNION
BUTLER
ARMSTRONG
CLEARFIELD
CENTRE
BEAVER
SNYDER
NORTHUMBERLAND
CARBON
MONROE
NORTHAMPTON
INDI
MIFFLIN
JUNIATA
SCHUYLKILL
ALLEGHENY
CAMBRIA
BLAIR
LEHIGH
WESTMORELAND
PERRY
NTINGDON
PHIN
LEBANON
WASHINGTON
BERKS
CUMBERLAND
MONTGOMERY
BUCKS
GREENE
FAYETTE
SOMERSET
BEDFORD
FULTON
FRANKLIN
ADAMS
YORK
LANCASTER
CHESTER
DELAWARE
PHILADELPHIA

Figure 1

United Way
Flood Recovery Funds
Department of Community Affairs
Community Action Agencies
Mental Health/Mental Retardation
Day Care Appropriations 54
State Revenue Sharing
Neighborhood Assistance Act
Schools
Churches
Solicitations
Private Foundations
Flower and Bake Sales
Housing and Community Development Act of 1974

APPALACHIAN CHILD DEVELOPMENT PROGRAM PROJECT SUMMARIES

Maternal Health Care Program of Luzerne County

Nurse Midwifery Program

Objectives:

1. Provide prenatal, natal, and post-natal care to high-risk, medically indigent pregnant women.
2. Provide mothers with knowledge of good child care practices.

Services:

Outreach through social service agencies and schools
Prenatal and postnatal care using a physician/nurse mid-wife team approach
Health screening and evaluation of mother and infant
Examination of infant at 6 and 8 weeks and referral to Child Health Conference or family physician
Referral to medical specialists
Referral to family planning clinic
Followup of mother and child

Eligibility:

High-risk, medically indigent pregnant women especially teenagers.

Location of Services:

Luzerne County (Wilkes-Barre) 35 mile radius of Mercy Hospital.

Remarks:

The program is part of Maternal Health Care Services of Northeast Pennsylvania which also administers a family planning and teenage parent program. This program serves about 500 cases annually.

Funding:

	1973-74	1974-75
ARC	193,140	330,954
Local	37,966	78,362

Altoona Hospital Social Services Project (Blair County)

Objectives:

1. Provide support and counseling to patients and families during medical crisis.
2. Provide referral services to patients.
3. Provide education in the use of other community services.

Services:

Counseling
Information
Referral
Transportation

Eligibility: All patients of Altoona Hospital

Location of Services: Blair County (Altoona)

Funding:

	1973-74	1974-75
ARC	82,678	96,460
Local	985	14,230

Bedford County 4-C Information and Referral Program

Objectives:

1. Inform parents of services available for the pre-school child.
2. Refer children to needed medical services.
3. Provide counseling and information to parents.

Services:

Outreach through home visiting
Nutrition information provided to parents
Family planning information provided to parents
Transportation to services
Referral to other agencies

Eligibility: All residents of Bedford County.

Location of Services: Bedford County

Remarks: Children served by the program in 1973 - 997

Funding:

	1973-74	1974-75
ARC	68,267	62,436
Local	3,000	3,000

Blair County Home Nursing Agency

High Risk Maternal Health Project

Objectives:

1. Provide home nursing supervision to all high-risk pregnant women and their children.
2. Provide education for parenthood classes.
3. Provide prenatal care in clinics.

Services:

Outreach through doctors, social agencies, etc.
Home nursing supervision during prenatal and postnatal periods
Home nursing supervision for young children
Health and nutrition education
Prenatal classes
Child care education for parents
Physical therapy, speech therapy and homemaker services
Referral to other services

Eligibility:

All women and children needing services. Medical assistance and other third-party payments used when available. Fee is paid by those able to do so.

Location of Services:

Blair County (Hollidaysburg)

Remarks:

Number of families served in 1973-74 was approximately 300.

Funding:

	1973-74	1974-75
ARC	59,482	81,958
Local	224	120

Blair County Pre-School Dental Center

Objectives:

1. Provide comprehensive dental treatment for the pre-school needy child.
2. Provide community dental education program to all groups and organizations in Blair County.
3. Provide dental care to handicapped children.
4. Provide a program of preventive services and dental health education.

Services:

Outreach through other service agencies and organizations
Diagnosis and evaluation
Oral prophylaxis
Dental health education for parents
Fluoride treatment
Comprehensive dental care

Eligibility:

All pre-school children, handicapped children and expectant mothers. Fee is charged based on MA fee scale. Sliding fee is charged to patients without MA.

Location of Services:

Blair County (Altoona)

Remarks:

Number of children served in 1973 - 100.

Funding:

	1973-74	1974-75
Title IV-A	61,573	-
ARC	59,223	43,710
Local	240	68,028

Comprehensive Day Care Programs

Demonstration

Objectives:

1. Provide for the physical, emotional and mental development of young children.
2. Provide for the care and supervision of children so that families can achieve economic self-sufficiency through employment.
3. Identify and compensate for deficiencies caused by a disadvantaged environment or emotional and physical handicaps.
4. Provide parent education services in child development and care

Services:

Care and supervision of children for part of a 24 hour day
Educational program designed to affect the child's social, cognitive and language skills
Health screening including physical exams, immunizations and referral for diagnosis and treatme
Food services and nutrition education
Parent education in child care and development
Psychological testing and diagnosis
Dental examinations
Vision screening
Hearing and speech screening

Eligibility:

All young children who are residents of Appalachia. Families who are able to do so must share in the cost of services according to their ability to pay.

Location of Services, Remarks and Funding:

Blair County Area Day Care Center - The program also provides family day care homes that provide day care in the Altoona, Tyrone and rural Blair County areas. The program serves 78 children.

	ARC	Title IV-A	Local
1973-74	$23,999	$71,997	$ 1,803
1974-75	15,984	45,774	48,016

Bradford County Child Development Program - The program also utilizes family day care homes. The program is expected to serve about 239 children in 1974-75 in eleven sites throughout the county.

	ARC	Title IV-A	Local
1973-74	$36,570	$656,733	$182,341
1974-75	36,847	478,521	180,957

Day Care Programs (Continued)

Cambria County Child Development Center (Ebensburg)- The program provides a home start and an outreach component that uses a mobile van. Other services include physical therapy for handicapped children and a dental clinic for exams and fluoride treatment. The center houses a Title I ESEA program for children with special needs. Provides services to about 225 children.

	ARC	Title IV-A	Local
1973-74	$244,891	$257,201	$ 3,523
1974-75	119,412	251,363	123,569

Comprehensive Child Development Program of Carbon County

	ARC	Title IV-A	Local
1974-75	$102,874	-	$11,821

Children's Services of Tioga County - Provides services for about 125 children.

	ARC	Title IV-A	Local
1973-74	$59,004	$311,982	$44,991
1974-75	61,296	337,650	51,253

Columbia County Day Care Program, Inc. - Also provides services through family day care homes. Provides services for 120 children.

	ARC	Title IV-A	Local
1974-75	$55,571	$ 86,500	$31,700

Fulton County Child Development Center - Also provides services through family day care homes. Coordinates activities with an industrial day care center. Provides services for 84 children.

	ARC	Title IV-A	Local
1973-74	$57,827	$ 76,535	-
1974-75	NA	NA	NA

Huntingdon County Model Child Development Program - The program includes a summer recreation program as well as a Penn State, pre-school training study class. The program provides services for about 60 children.

	ARC	Title IV-A	Local
1973-74	$34,662	$113,961	$ 4,383
1974-75	28,056	57,054	16,015

Day Care Programs (Continued)

Mifflin County Child Development Program - Services for about 45 children, including a new family day care home program.

	ARC	Title IV-A	Local
1973-74	$69,067	$ 43,221	$27,300
1974-75	NA	NA	NA

Schuylkill County Child Development Program - A Head Start and Family Resource Program are incorporated into this program.

	ARC	Title IV-A	Local
1973-74	$58,210	$174,629	-
1974-75	NA	NA	NA

Somerset County - Integrating physically and mentally handicapped in a normalized program. Serves about 70 children.

	ARC	Title IV-A	Local
1973-74	$105,981	$109,972	$ 300
1974-75	-	NA	NA

Sullivan County - The program includes family day care homes and serves about 60 children in two sites.

	ARC	Title IV-A	Local
1973-74	$28,705	$ 99,968	$ 4,950
1974-75	39,991	90,472	38,759

Early Child Development Program (Multi County)

Objectives:

1. Screen and diagnose children from 0-3 years of age for developmental problems in their own homes.
2. Develop a treatment procedure to correct problems that are diagnosed.
3. Educate parents to detect signs of developmental problems in their children.

Services:

Health screening and evaluation by Nurse-Social Workers
Psychological testing
Dental examinations
Nutritional evaluation
Education for parents to detect and overcome developmental problems in their children
Counseling for families with children with developmental problems
Treatment resources to correct developmental problems
Followup to insure treatment is followed
Transportation and babysitting when needed
Referral of children with problems

Eligibility: Children 0-3 years old in families served by a related day care program.

Location of Services: Cameron, McKean, Potter, and Elk Counties

Remarks: Program will expand to include all children from 0-3 years old in the counties served once siblings of children in the day care program are served.

Funding:

	1974-75
ARC	121,560
Title IV-A	67,046
Local	32,676

Educational - Medical Infant Care Program (Allegheny County)

Objectives:

1. Provide infant day care to children of teenage parents attending the Educational-Medical School.
2. Research the comparable effectiveness and costs of group care and family day care for infants.
3. Develop child care skills of the parents involved in the program.

Services:

Health screening and evaluation of mother and child
Day care for infants
Parent education in child care skills
Health care provided to the child
Health screening of all family members
Referral to family planning and other services

Eligibility: Teenage mothers and their children attending the school.

Location of Services: Allegheny County (Pittsburgh)

Remarks: The school serves as the pregnant girls school for the Pittsburgh School District. The program will serve 20 children, 10 in group care and 10 in family day care.

Funding:

	1974-75
ARC	20,007
Title IV-A	62,557
Local	845

Family Planning Programs

Objectives:

1. Provide family planning services to all women who desire the services.
2. Reduce the chances of high-risk pregnancies.
3. Promote family planning as a preventive means of maintaining the health and total well-being of the family unit.

Services:

Health screening and evaluation
Laboratory tests including hematocrit or hemoglobin, urinalysis for sugar and protein, pap smear, serology, G.C. culture, pregnancy test sickle cell screening
Provision of materials and counseling in their use
Scheduled visits at specified intervals depending on method chosen
Outreach and casefinding
Counseling for infertility services
Referral for medical and social problems and for pregnancy related services
Public education via media and formal classes
Followup for unkept appointments

Eligibility:

All residents of Appalachia Pennsylvania Medical assistance recipients are requested to sign forms for Title IV-A reimbursement. Patients desirous uncapable of paying may do so on a voluntary basis.

Bedford-Huntingdon Family Planning Program - (Huntingdon, Broad Top, and Bedford) - The program also includes classes in nutrition, child growth and development and home management.

	1973-74	1974-75
ARC	$105,400	$105,265
Title IV-A	32,658	32,115
Local	1,643	-

Somerset County Family Planning Program - The program also includes classes in nutrition, child growth and development, and home management. Estimated number of persons to be served is 360 annually.

	1974-75
ARC	$32,246
Title IV-A	15,304
Local	1,700
State	551

Columbia-Montour Counties (Berwick, Geisinger) - The program also includes babysetting and transportation services for patients when needed. Estimated number of patients served - 750 annually.

	1974-75
ARC	$47,676
Local	21,294

Family Planning of Western Pennsylvania - Twenty-three (23) counties in Northwestern and Southwestern Pennsylvania in 39 clinic sites.

	1974-75
Title IV-A	$522,000
ARC	58,000
Title X	2,845,400
Local	645,400

Northview Heights Infant Care Project (Allegheny County)

Objectives:

1. Education parents, especially teenage parents in child care and development.
2. Provide day care for children from 0-3 years of age.

Services:

Health screening and evaluation of mothers and infants
Health screening of all family members
Day care for children and infants
Parent education in child care
Health care provided to the children
Referral to other agencies and resources including family planning

Eligibility: Young parents and their children residing at Northview Heights Housing Project.

Location of Services: Allegheny County (Pittsburgh)

Remarks: The project serves 20 children and their families.

Funding:

	1974-75
ARC	82,490
Local	12,670

Teenage Parent Program (Luzerne County)

Child Development Council of Northeastern Pennsylvania

Objectives:

1. Provide education in parenting to teenage parents.
2. Provide other educational opportunities to the mother.
3. Ensure the proper pre and post-natal care of the mother.
4. Ensure the care and development of the child.

Services:

Pre-natal care provided through Maternal Health Services of Northeast Pennsylvania
Social service counseling and nutrition education
Post partum services at Maternal Health Services of Northeast Pennsylvania
Child day care services so that the mother can return to school
Education in parenting and health care of the infant

Eligibility: Teenage parents (mother and father)

Location of Services: Luzerne County (Wilkes-Barre)

Remarks: This program is related to the Maternal Health Care Program (A1).

Funding:

	1974-75
ARC	11,730
Local	18,126
Title IV-A	36,835

Below, is a data matrix which is partially compiled through the use of the E.M.I.S. The matrix contains demographic data on all the projects funded through ARC and represents an up-dated version of an earlier matrix.

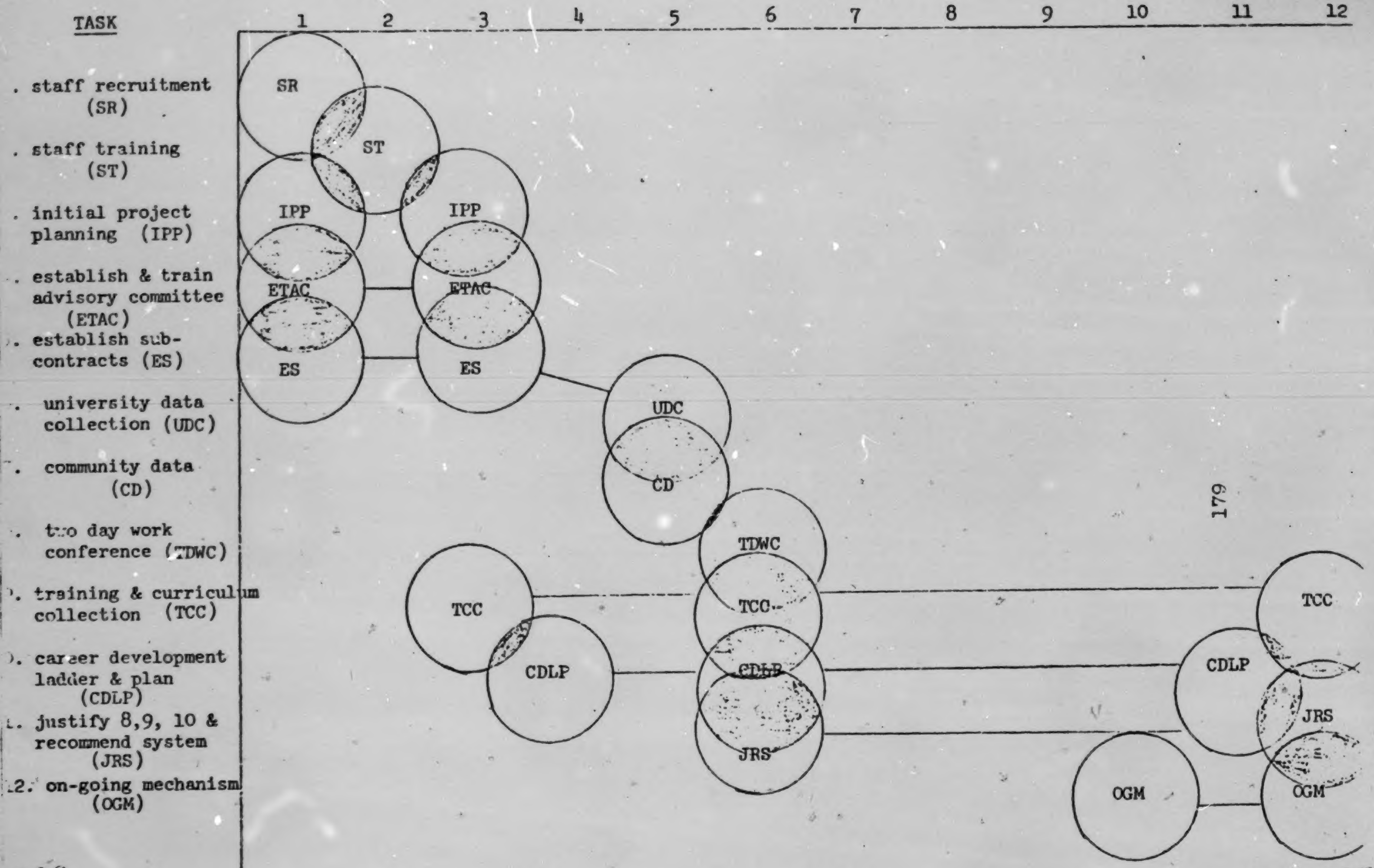
PROGRAM COMPONENTS / A.R.C. PROJECTS	Info & Referral Svc	Prenatal Care:	Medical	Educational	Nutrition	Soc. Out-reach	Pediatric Health	Med. Screening	Speech Screening	Vision Screening	Dental Screening	Parent Education	Handicapped	Center Day Care	Home Visitors	Pediatrician	Speech Therapist	Nurse	Infants	Toddlers	Preschoolers	Parent Involvement	Transportation	Family Day Care
ALTOONA HOSP. Altoona	●		●	●		●	●	●				●										●	●	
BEDFORD 4-C I&R Bedford	●		●						●	●			●		●	●	●		●	●	●	●	●	
BEDFORD-HUNT. FAMILY PLANNING New Cumberland	●					●		●										●					●	
BLACK LICK Indiana	●						●				●		●			●		●						
BLAIR CO DAY CARE, Altoona	●			●	●	●		●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●
BLAIR CO. EXT. ltoona	●			●	●	●		●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●
BLAIR HOME NURS. Hollidaysburg	●	●	●		●	●			●				●		●	●	●	●	●	●	●	●	●	●
BLAIR CO. DENTAL Altoona	●		●	●	●	●					●	●	●						●	●	●			
BRADFORD CHILD DEV., Athens	●			●	●	●		●	●	●	●	●	●	●	●		●	●			●	●	●	
CAMBRIA CO. CHILD DEV., Ebensburg	●		●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
CARBON CO. CHILD DEV., Jim Thorpe	●		●	●	●	●		●	●	●	●	●	●	●	●	●	●	●			●	●	●	
COLUMBIA DAY CARE, Bloomsburg				●	●	●		●	●	●	●		●	●	●		●	●			●	●	●	●
HUNTINGDON DAY CARE, Huntingdon	●			●	●	●		●	●	●	●		●	●	●		●	●			●	●	●	
INFANT TODDLER Wilkes-Barre			●	●	●	●		●		●	●	●	●	●	●	●	●	●	●	●	●	●		●
LUZ. TEENAGE PARENT, Wilkes-Barre		●	●	●	●	●		●		●	●	●	●	●		●		●	●	●		●		
MATERNAL HEALTH NE PA., Wilkes-Barre	●	●	●	●	●	●						●			●	●		●	●			●	●	
MIFFLIN CO. DAY CARE, Lewistown	●		●	●	●		●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●
SCAN EARLY CHILD DEV., Emporium	●		●	●	●	●		●	●	●		●	●	●	●		●	●	●	●	●	●	●	
NORTHVIEW HGTS. INF. CARE, Pgh.	●			●	●	●		●				●		●					●	●		●		
CHUYLKILL CHILD DEV., Avoca	●		●	●	●		●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●
SULLIVAN CO. CHILD DEV., Dushore				●				●		●				●				●	●	●	●			●

After providing the demographic and baseline data on the State of Pennsylvania and the Appalachian Regional Commission, possibly a more theoretical orientation would be more helpful now. I have included flow sheets, data collection sheets, etc. to depict what a theoretical approach would be for designing a regional model.

The first flow sheet breaks down according to months, the tasks that should be completed in designing the regional model.

The following flow sheets are basically self-explanatory in that they construct how a theoretical cost analysis coefficient would be calculated. The last data collection sheet helps to organize data about a day care program. A sheet similar to this could be placed on a 5 x 8 index card and would be a handy way of keeping information on a great number of programs.

See Chapter 5, which uses a set of formulas to calculate an actual cost analysis coefficient or unit cost coefficient. The coefficient presented there is for the total program and does not break it down for the various services provided and their influence on the unit cost.


TASK
1
2
3
4
5
6
7
8
9
10
11
12
. staff recruitment (SR)
. staff training (ST)
. initial project planning (IPP)
. establish & train advisory committee (ETAC)
. establish sub-contracts (ES)
. university data collection (UDC)
. community data (CD)
. two day work conference (TDWC)
. training & curriculum collection (TCC)
. career development ladder & plan (CDLP)
. justify 8,9, 10 & recommend system (JRS)
2. on-going mechanism (OGM)
SR
ST
IPP
IPP
ETAC
ETAC
ES
ES
UDC
CD
TDWC
TCC
TCC
TCC
CDLP
CDLP
CDLP
JRS
JRS
OGM
OGM

FLOW CHART Chart #9

Chart # 10

THEORETICAL MODEL FOR THE COMPUTATION OF A COST ANALYSIS COEFFICIENT

	CENTERS		
	BASELINE	TREATMENT	POST-TEST
CHILDREN (A)	TRADITIONAL MEASURES ECOLOGICAL MEASURES	INDIVIDUALIZED INSTRUCTION PROGRAM	TRADITIONAL MEASURES ECOLOGICAL MEASURES
STAFF (B)	ROLE STYLE SELF-CONCEPT ECOLOGICAL MEASURES	TRAINING: GROUP INDIVIDUALIZED	ROLE STYLE SELF-CONCEPT ECOLOGICAL MEASURES
BUDGET (C)	EQUIPMENT FOOD SALARIES ECOLOGICAL MEASURES	LOCALITY VS REGIONALIZATION	EQUIPMENT FOOD SALARIES ECOLGOCIAL MEASURES

$$\frac{(A)+(B)}{(C)}$$

COST-ANALYSIS COEFFICIENT

Chart #11

181

DIRECTOR MR. JACK J. EXELBERT
ADD WHITE SWAN
559 GARNET AVENUE, NO. BABYLON, N.Y.
COORDINATOR MRS. TUDY E. EXELBERT, M.S.E.

PHONE NUMBER (516) 667-8600

MRS. EXELBERT IS A NATIONALLY CER TIED SPEECH AND HEARING THERAPIST.

STUDENTS

	HIGH	MID	LOW
BLACK	——	——	20
WHITE	——	150	——
PUERTO RICAN	——	——	5

NUMBER OF SOCIAL SERVICE 0

TOTAL	175
NUMBER	260

STAFF

	H.S.	COLLEGE	GRAD.
BLACK	——	——	——
WHITE	3	8	1
PUERTO RICAN	——	——	——

DIRECTOR-WHITE
CERTIFIED ELEMENTARY TEACHER

RATIO 8-1

RESEARCH

TYPE	NUMBER INV.	NO
OPEN	SPACE IS THE ONLY LIMIT	-----

STUDENT TEACHERS

PARTICIPATION	OBSERV	NO
YES	YES	-----
3-5	5	-----

RETURNABLE SERVICES

FEES	NO
CONSUL	
SPEAKERS	YES
OTHER	

EDUCATIONAL PROGRAM AND CURRICULUM

THEORIES	LAYOUT	SCHEDULE
I. SOCIAL CONCEPT--CITIZENSHIP	2-3yr old class 1-KINDERGARTEN 2-4YR OLD CLASS DAY CAMP--5-12yr	9:00-4:30 KINDERGARTEN 9:00-1145-HALF DAY 1:00-3:45- " " 9:00-3:45-FULL DAY
II. PLAY-COGNITIVE	EQUIP TABLES-SEMI-CIRCULAR TABLE LOCKERS, NO HOOKS (PERSONAL)	BUSED YES 6 BUSES 100%

STRUCTURE

	HALF-DAY	FULL	RELIC
NURSERY (PRIVATE)	X	X	
DAY CARE			
COOP			
PUBLIC			
KINDERGART		X	
SUMMER DAY CAMP		X	

PAST RESEARCH		PRESENT RESEARCH	
RESEARCH	DATE	RESEARCH	DATE
1. AFFILIATION WITH CENTRAL ISLIP HOSPITAL--STUDENT NURSES FOR COURSE WORK.	9/66-6/71		
2. AFFILIATED WITH FARMINDALE AND C.W. POST--OBSERVERS FOR COURSE WORK.	9/66-6/70		

ADDITIONAL NOTES

1. THERE IS A MORNING AND AN AFTERNOON STAFF--6 in the morning and 6 in the afternoon. IT IS PRACTICALLY LIKE HAVING TWO SEPARATE SCHOOLS.

2. YEARS IN EXISTENCE--8 years.

3. NO TESTING IN THE PROGRAM. OPEN TO SHARING FILES WITH US AND TO HAVE TESTS ADMINISTERED TO THEIR STUDENTS.

CHAPTER 4

Structure and Response

In this chapter, I will structure what was done on our SRT's and how information was structured coming into our office. The SRT's were our qualitative analysis. See Appendix II for additional criteria for evaluation. What follows are the criteria or checklist that we used on all our SRT's and the guidelines that programs had to meet as part of our qualitative evaluation.

1. Examination of the evaluational aspect of the program including:
    a) achievement of goals and objectives?
    b) is evaluation system built in?
    c) what kind of evaluation used?
    d) how is evaluation done?
    e) is evaluation shared by staff?
    f) is evaluation shared with personnel committee, the board?
    g) is there a merit system?
    h) what does the staff think of the program?
    i) how do the parents view the program?
    j) do parents have an input into the evaluational system?

2. The medical component of the program including:

    a) medical screening and intake?
    b) cleanliness of the facility?
    c) are they programmed for medical emergencies?
    d) how do they care for a sick child?
    e) medical referrals?
    f) utilization of physicians and/or nurses or other agencies?
    g) safety practices?
    h) is equipment the proper size for children?
    i) supplemental vitamins used?
    j) kitchen and food preparation?
    k) dental program and exams?
    l) are the children forced to eat all on plate?
    m) health and safety in day care homes?
    n) fire hazards?
    o) education of parents on health, safety and nutrition?

3. Education of the staff, parents, day care mothers and community in relation to child development skills and/or family planning techniques, this includes:
    a) staff meetings, are they administrative only or used for teaching?
    b) what is the educational background of the staff? (personnel files)
    c) absenteeism high or low?
    d) are parents involved in curriculum planning?
    e) parent-teacher conferences?

4. Areas concerned with outreach including:
   a) the workers and their function as information givers, referrals made, transportation given and education of community done?
   b) agency to agency interaction in relation to referrals?
   c) follow-up of people seen?
   d) techniques for approaching a new household?

5. Program's use of public relations including:
   a) P.A.C.?
   b) advertising in paper, radio or TV?
   c) community organization talks?
   d) films made?
   e) rapport with parents, children, board and community?

6. Administration of program to include:
   a) planning process for continuum?
   b) problem areas in budget categories e.g. stipend for day care home mothers?
   c) development of revisions, are they going to spend all of the money in the budget and if not how much will be left?
   d) if IV-A monies are involved, has that budget been revised and does it affect the ARC share?
   e) are they going to see self-sufficiency after three years? (local share)
   f) overstaffing patterns?
   g) who approves and do they use time sheets?
   h) kind of bookkeeping used, e.g. who signs purchase contracts?
   i) do they withhold money for two weeks on a new employee or is it paid as worked?
   j) is there a petty cash fund?
   k) by-laws of corporation, organizational chart and personnel policies?
   l) has a close-out been done?
   m) what is the relationship of the director to the governing body? Does the executive committee meet prior to full board? Do minutes go out to the entire board? What is the interaction between the board and the P.A.C.? Are there one-third consumers on the board? Who are the board members and what are their job titles?
   n) what are the staff's feelings toward the SRT and us as ARC staff? Do they want T/A?

7. Social Service component including:
   a) how does the social worker interact with the parents?
   b) how is the intake done, is the child brought in or the staff member who will have that child in class?
   c) how valid is the intake procedure?
   d) does the social worker have parent-child and/or staff conferences?
   e) is the social worker sensitive to the parent's and/or child's needs?
   f) what does happen if the child gets sick?

GUIDELINES

SAFETY HAZARDS

Fire Plans

Fire Drills

1. prevention
2. evacuation
3. extinguishers

Exposed outlets & wires

Annual inspection

First Aid Kits

Guard Rails at windows

Open walls

Chipping paint

sanded wood

NUTRITION

Milk (Benedict)

More than 4 hours hot meal

Mid-morning & afternoon rest period one hour a day.

One hour/1/2 hour recreation period

Snacks

EDUCATION

Staff: Trained Staff

Members in child development

Health Exam

[illegible] Test

Parents

Children

SANITATION

Health Aides

Disposable Cups or water fountains

Change of clothes

Cots & Blankets

Sandboxes

Infants' health record
Vac. children kept separate
Health History forms
Visit 1 x week
Exam 30 days prior
R.N. available
Daily assessment of Children

Immediate dental care

vision

Hearing

No dispensing of medication,

M.D. notes

Physical Plan

35 sq. ft./child

Separate facility for infants

RECORDS

Health History

Staff abs.

General information

MONEY ?

Fund raising

EDUCATION (cont'd)

Concepts & Problem Solving

abilities for children not just

motor skills.

Contact abmulance corps

Parent about course

Meetings

Infant nursery

beds 2 feet apart

no pillows

Robin:HH & Consent form

First Aid Program

Dorothy)
) First Aid Program
Ileen)

Sanitation: Alison
Eileen
Pam

Dental, Vision, Hearing: Debbie
Alison
Calusta

Safety Hazards, Physical: Calusta

Nutrition:

Questions regarding programs (general)

How are ARC dollars to be picked up after third year?

Are we paying (subsidizing) fee payers?
providing local match

How many centers? homes?

Where are ARC children located?

Where are the centers located?

How many children? What Ages?

Fee -- how much?

Do you have any six year olds? Are they ARC children?

Do you have any younger than three years?

Who conducts parent education?

Describe your parent population.

Transportation -- children to/from home.

Food central kitchen or not.

What is your daily attendance?

What is your enrollment?

Who does planning?

Emphasis of program.

Check age appropriate toys and materials.

Lunch -- family style or not.

Five year olds -- pre-academic or not.

Illness -- isolation, sick buy.

Menus

Ratios check.

Group size.

Transitive times

Substitutes

Child Development profiles

When children arrive/When staff arrives

Vertical/Horizontal grouping

Role of a coordinator

Physical setting

Equipment

Activity areas

Children's records

Location of bathrooms

Health clearances

Liability insurance

How are consultant's utilized

Pre-service

In-service training

Child centered

Lesson plans

Deviant children are handled.

Teacher's backgrounds

Discipline techniques

Use of television

Sleeping arrangement

Attitudinal uneasiness

Medication permission

Intake is done by caseworker

- Personnel records
- Board structure
- Vested interest
- Bylaws
- Committee structures
- Contracts for use of space
- Supervision hierarchy
- Hiring/firing procedures
- Administrative records
- Evaluation of staff procedures
- Identification of funding sources
- Contractual agreements with family day care homes
- Social work health
    - Intake procedures
    - Records
    - Write-ups
    - Consistency in files between main office and classrooms
- Career ladder
- Personnel files
    - Job descriptions
    - Appointment letters
    - Attendance records on all staff
    - Letters of commendation
    - Letters of termination or resignation
- Overall delivery of services
- Attendance records
- Recording system
- Relationship with CBA
- Successful referrals
- Number in treatment programs

1. Application for Permit.

2. For corporation - copy of filing receipt from Department of State, Albany of the Certificate of Incorporation following approval by New York State Board of Social Welfare. This may be obtained from the attorney.

3. Budget on annual basis. Itemized income and expenses.

4. Floor plan of indoor and outdoor premises. Dimensions of both. Use of rooms designated. Presentation should be clear and comprehensible. Description of building, interior and exterior construction.

5. Local approvals - building, fire, health, zoning departments.

6. Copy of plan for automatic fire alarm detection system. To be submitted in advance of installation and with approval of local fire department.

7. Statement of purposes and goals. Include criteria for accepting children, type of child served, age range, duration of session, focus of program, etc. A statement of general philosophy.

8. Description of program content, schedule of activities.

9. Staffing. Personnel policies, description of duties of each position, staff coverage during period of operation, description of qualifications of each category of staff (Director, Teacher, Aide, etc.) Resume of hired staff, including name, age, education, experience, hours of work and assignment.

10. Written plan of staff development training program.

11. Copies of all records used. Intake or Admission sheet or registration form, agreements with parents, medical and dental forms for children, forms used to record attendance.

12. Written emergency evacuation and fire drill plans.

13. Description of health plan and services with evidence of physician's review (signature).

14. Description of Social Services component, applicable for facility in receipt of public funds.

15. Description of Education component.

16. Copies of menus, and statement of source of consultation on nutrition. Include snacks as well as meals.

17. Statement of need in the community for the day care service, statistics gathered, numbers of children in need of the service, sources from which information was collected.

Here again is the hypothetical proposal which is the first standardized document we receive from our programs which plugs them into EMIS. Even if one is not thinking in terms of an evaluation system, this form alone is very useful. Take a good look.

COMMONWEALTH OF PENNSYLVANIA
GOVERNOR'S OFFICE
OFFICE FOR HUMAN RESOURCES
500 STATE STREET BLDG.
N.W. CORNER THIRD & STATE STREETS
HARRISBURG, PA. 17120

Dear ,-----.

The purpose of this letter is to provide instructions for using the enclosed hypothetical proposal as a reference in filling out your own continuation proposal.

GENERAL INSTRUCTIONS FOR CONTINUATION PROPOSALS:

1. No revisions will be accepted to continuation grants in Harrisburg after the seventh (7th) month of continuous operation.

2. The continuation proposal is to be in the specific format outlined in the enclosed hypothetical proposal.

3. The statistical forms (pages 3,4,5,6,7,8,9,10) and the budget forms (pages i, ii,ii,iv,v,vi,vii,viii,ix,x) are to be filled in as they are. No revisions of these forms will be accepted.

4. Narratives are to be limited to: (for the past funding year)
goals and objectives satisfied
problems identified
solutions for problems

proposed goals and objectives for the upcoming year

All of the above are to be in quantitative terms.

5. No continuation proposal will be accepted if it is over fifteen (15) pages. This includes the narrative and budget sections.

6. Nine (9) copies plus the original are to be submitted to Harrisburg. Only two sets of the appendices need to be submitted.

7. The outside cover should be similar to the one used with the hypothetical proposal.

8. All new HEW forms and ARC forms are to be included in the continuation proposal. Please xerox the originals you have been provided with.

9. Any questions about the continuation proposals should be addressed to the appropriate project sponso We will be able to provide a three hour block of time for technical assistance for those who need help in writing their continuation. Please just call for an appointment.

SPECIFIC INSTRUCTIONS CONTAINED WITHIN THE HYPOTHETICAL PROPOSAL FOR YOUR CONTINUATION PROPOSAL

STATISTICAL FORMS:

1. On page 3, Educational or implementation component, fill it out accordingly and xerox. Make it part of your continuation proposal. The form is self-explanatory. Just fill in the blanks.

2. On page 4, if your daily schedule for the children will not fit here, please use the back of the form. Under define objectives of educational program in behavioral terms, the items written in are only examples, please supply your own objectives for the children enrolled in your program according to age categories. If you do not have enough room, please use the back of the form. Xerox this form and make it part of your continuation proposal. The other two items on this page are self-explanatory.

3. Page 5 is self-explanatory, just fill in the appropriate spaces. Xerox the upper portion of this page and include a sample menu. Under % of time engaged in the following daily activities please indicate the % of time for:

0-15 months ________
15-36 months ________
36+ months ________

e.g. if you have 15 toddlers, how much of their day (the total group) is taken up by outdoor play--10%, 20%, 30%. Please enter these data on the back of the form.

4. Pages 6, 7 and the upper portion of page 8 are all self-explanatory and just need to be filled in. Please xerox these forms and make them part of your continuation proposal.

5. On page 9, please note that the bottom portion of this page and page 10 apply to all projects and need to be filled out accordingly and xeroxed. Make this part of your continuation proposal also. If you have other services than the ones listed please put them on the back of page 10.

BUDGETARY FORMS:

When completing the enclosed budget forms, please refer to the instructions mailed to you March 7, 1975. When preparing your proposal for submission please arrange your budget forms in the following sequence:

1. ARC Form 3
2. Application for Federal Assistance - Part I
3. Project Approval Information - Part II
4. Budget Information - Part II & IV
5. Assurances - Part V
6. Budget Summary
    A. Itemized Budget

Note: ARC will only pay up to 80% of the total Equipment and Renovations costs. 20% of the cost must be paid with local cash.

Local Cash - All local cash must be properly documented.

Sincerely,

pc

OMB NO. 63-R0136

APPLICATION FOR FEDERAL ASSISTANCE (NONCONSTRUCTION PROGRAMS)

PART I

1. State Clearinghouse Identifier

2. Applicant's Application No.

3. Federal Grantor Agency

Organizational Unit

Administrative Office

Street Address – P.O. Box

City State Zip Code

4. Applicant Name

Department Division

Street Address – P.O. Box

City County

State Zip Code

5. Descriptive Name of the Project

6. Federal Catalog No.

7. Federal Funding Requested

$

8. Grantee Type

______ State, ______ County, ______ City, ______ Other (Specify)

9 Type of Application or Request

______ New Grant, ______ Continuation, ______ Supplement, ______ Other Changes (Specify)

10. Type of Assistance

______ Grant, ______ Loan, ______ Other (Specify)

11. Population Directly Benefiting from the Project

12. Congressional District

a.

b.

13. Length of Project

14. Beginning Date

15. Date of Application

16. The applicant certifies that to the best of his knowledge and belief the data in this application are true and correct, and that he will comply with the attached assurances if he receives the grant.

Typed name	Title	Telephone Number
Signature of Authorized Representative		AREA CODE / NUMBER / EXT

For Federal Use Only

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OMB NO. 80-R0 186

PART II

PROJECT APPROVAL INFORMATION

Item 1.
Does this assistance request require State, local, regional, or other priority rating?
______ Yes ______ No

Name of Governing Body ________________
Priority Rating ________________

Item 2.
Does this assistance request require State, or local advisory, educational or health clearances?
______ Yes ______ No

Name of Agency or Board ________________
(Attach Documentation)

Item 3.
Does this assistance request require clearinghouse review in accordance with OMB Circular A-95?
______ Yes ______ No

(Attach Comments)

Item 4.
Does this assistance request require State, local, regional or other planning approval?
______ Yes ______ No

Name of Approving Agency ________________
Date ________________

Item 5.
Is the proposed project covered by an approved comprehensive plan?
______ Yes ______ No

Check one: State ☐
Local ☐
Regional ☐
Location of Plan ________________

Item 6.
Will the assistance requested serve a Federal installation?
______ Yes ______ No

Name of Federal Installation ________________
Federal Population benefiting from Project ________________

Item 7.
Will the assistance requested be on Federal land or installation?
______ Yes ______ No

Name of Federal Installation ________________
Location of Federal Land ________________
Percent of Project ________________

Item 8.
Will the assistance requested have an impact or effect on the environment?
______ Yes ______ No

See instructions for additional information to be provided.

Item 9.
Will the assistance requested cause the displacement of individuals, families, businesses, or farms?
______ Yes ______ No

Number of:
Individuals ________________
Families ________________
Businesses ________________
Farms ________________

Item 10.
Is there other related assistance on this project previous, pending, or anticipated?
______ Yes ______ No

See instructions for additional information to be provided.

PART III – BUDGET INFORMATION

SECTION A – BUDGET SUMMARY

Grant Program, Function or Activity (a)	Federal Catalog No. (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.		$	$	$	$	$
2.						
3.						
4.						
5. TOTALS		$	$	$	$	$

SECTION B – BUDGET CATEGORIES

6. Object Class Categories	– Grant Program, Function or Activity				Total (5)
	(1)	(2)	(3)	(4)	
a. Personnel	$	$	$	$	$
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges					
j. Indirect Charges					
k. TOTALS	$	$	$	$	$
7. Program Income	$	$	$	$	$

OMB NO. 80-R0186

SECTION C – NON-FEDERAL RESOURCES

(a) Grant Program	(b) APPLICANT	(c) STATE	(d) OTHER SOURCES	(e) TOTALS
8.	$	$	$	$
9.				
10.				
11.				
12. TOTALS	$	$	$	$

SECTION D – FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$	$	$	$	$
14. Non-Federal					
15. TOTAL	$	$	$	$	$

SECTION E – BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b) FIRST	(c) SECOND	(d) THIRD	(e) FOURTH
16.	$	$	$	$
17.				
18.				
19.				
20. TOTALS	$	$	$	$

SECTION F – OTHER BUDGET INFORMATION

(Attach additional Sheets If Necessary)

21. Direct Charges:

22 Indirect Charges:

23. Remarks:

PART IV PROGRAM NARRATIVE (Attach per instruction)

PART V

ASSURANCES

The Applicant hereby assures and certifies that he will comply with the regulations, policies, guidelines, and requirements including OMB Circulars Nos. A-87, A-95, and A-102, as they relate to the application, acceptance and use of Federal funds for this Federally assisted project. Also the Applicant assures and certifies with respect to the grant that:

1. It possesses legal authority to apply for the grant; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body, authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.
2. It will comply with Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and in accordance with Title VI of that Act, no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the applicant receives Federal financial assistance and will immediately take any measures necessary to effectuate this agreement.
3. It will comply with Title VI of the Civil Rights Act of 1964 (42 USC 2000d) prohibiting employment discrimination where (1) the primary purpose of a grant is to provide employment or (2) discriminatory employment practices will result in unequal treatment of persons who are or should be benefiting from the grant-aided activity.
4. It will comply with requirements of the provisions of the Uniform Relocation Assistance and Real Property Acquisitions Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced as a result of Federal and federally assisted programs.
5. It will comply with the provisions of the Hatch Act which limit the political activity of employees.
6. It will comply with the minimum wage and maximum hours provisions of the Federal Fair Labor Standards Act, as they apply to hospital and educational institution employees of State and local governments.
7. It will establish safeguards to prohibit employees from using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties.
8. It will give the grantor agency or the Comptroller General through any authorized representative the access to and the right to examine all records, books, papers, or documents related to the grant.
9. It will comply with all requirements imposed by the Federal grantor agency concerning special requirements of law, program requirements, and other administrative requirements approved in accordance with Office of Management and Budget Circular No. A-102.

____
Project Name

____
Number & Ages of Children Served

BUDGET SUMMARY

CATEGORIES	Local Share	ARC Share	Other Federal Share	Total Cost
I. Personnel & Fringe Benefits				
II. Travel				
III. Equipment				
IV. Consumable Supplies				
V. Consultant & Contract Services				
VI. Space				
VII. Other Costs				
VIII. DPW Administrative Cost (only when necessary)				
TOTAL COST				

COMPOSITION OF LOCAL SHARE

__________________________ $ __________

__________________________ $ __________

__________________________ $ __________

__________________________ $ __________

__________________________ $ __________

__________________________ $ __________

__________________________ $ __________

Total Amount of Local Share $ __________

CATEGORY: I PERSONNEL	Annual Salary	Number of Months	% of Time	Local Share	ARC Share	Other Federal Share	Total Cost

Fringe Benefits

Fringe Benefits (Rate) _______

	Local Share	ARC Share	Other Federal Share	Total Cost
Category Total				

CATEGORY: II TRAVEL

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: III EQUIPMENT & FURNITURE

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: IV CONSUMABLE SUPPLIES

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: V CONSULTANT and CONTRACT SERVICES

Item or Nature of Service	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: VI SPACE

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: VII OTHER COSTS

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

CATEGORY: VIII DPW ADMINISTRATIVE COST

Item	Basis for Cost Estimate	Local Funds	ARC Funds	Other Federal Funds	Total Cost
	TOTAL COST				

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HYPOTHETICAL PROPOSAL FOR COORDINATED COMPREHENSIVE DAY CARE, FAMILY DAY CARE HOMES, OUTREACH & FAMILY PLANNING PROGRAM

I. INTRODUCTION: NEED ASSESSMENT

This program has been in operation for 7½ months. The program was started in order to meet the growing demand for services not otherwise provided in this rural area. After completing a cross-sectional analysis of needs in the county, the following lack of services was noticed:

1. Many of the welfare recipients could not look for jobs due to the constraints of childrearing.
2. Many mothers in middle income families were interested in returning to work but wanted more than a babysitting service for their children. They expressed a desire for preschool learning experiences.
3. Sample IQ testing was done on the preschoolers of welfare and middle income families which showed a slower learning process of the welfare children when compared to the middle income families.
4. Families in both the welfare and middle income brackets expressed a desire for more information regarding other services in the area especially information concerning birth control and how to obtain birth control methods.
5. Mothers of infants and toddlers expressed a desire to return to work but wanted a family-type learning experience for their children.

Based upon these results, a program was established consisting of four main components:

1. A day care center for children 3-6 years of age.
2. Five family day care homes for children ages 3 months to 3 years of age.
3. An outreach information and referral service.
4. A family planning clinic.

II. GOALS AND OBJECTIVES FOR FIRST YEAR OPERATION

First year's goals and objectives for each component and how they have been or are being met. (Note: since one or two components of this program is a totally funded ARC project, only 4 goals and objectives for each component will be used as examples.)

A-1 DAY CARE CENTER. Since a planning grant had previously been awarded to assist in finding a location for the center, staff hiring and training to obtain licensing, the center was ready for operation by July 1, 1974. The goals and objectives, therefore, concerned the actual operation of the center.

1.) To recruit 20 IV-A eligible children and 10 fee paying children for the center. This was accomplished through advertising, utilization of the needs assessment information by our outreach workers and door to door canvassing by the outreach workers. The center was filled by August 10, 1974. Some parents in the community expressed a dislike for group day care, consequently--

2.) Workshops concerning day care and what it's about were established once a week during July and August at different locations throughout the county. An attitudinal questionnaire was distributed before and after the workshop. Forty-five per cent of those parents who were against day care before the workshop changed their opinion after the learning experience.

3.) The testing of each child enrolled in the center to ascertain a developmental baseline to help in the establishment and/or adjustment of curricula. This was done through the use of the Denver Developmental. Based upon test results a curriculum was established having a developmentally eclectic philosophy as its base. The theories used in establishing the curriculum were:

a) cognitive
b) response-environment
c) learning
d) behavior modification

4.) To assess the developmental progress of each child throughout his/her day care experience. This is accomplished by comparison testing of the behavioral objectives designed for the children and actual learned responses.

A-2 FAMILY DAY CARE HOMES. Through the needs assessment, five areas throughout the county were considered as ideal locations for day care homes for infants and toddlers. The planning grant allowed for recruitment and training of the day care home mothers, thereby allowing the homes to begin operation on July 1, 1974.

1.) To have four children enrolled in each home. As a result of the needs assessment, ten children were enrolled in the homes immediately upon the beginning of operation. The remaining ten children were finally enrolled after three months of recruitment by the outreach workers.

2.) Continuation of child development education for the day care home mothers. Four-hour workshops are held every other Saturday at the day care center. The topics covered are based upon the needs expressed through questionnaires or verbally by the day care home mothers. The workshops are mandatory; therefore, financial reimbursement for time spent was considered appropriate.

3.) A developmental evaluation of all infants and toddlers in order to establish their baseline motor and cognitive skills to assist in the development of training criteria for the day care home mothers. This was accomplished through the use of the Bayley Developmental and Cattell testing instruments. The results were correlated and corresponding learning areas incorporated into the workshops for the mothers.

4.) A daily interaction between the day care home mother and the parent, discussing the behavior of the child that day and what the child has learned. Through weekly visits by the social worker with the day care home mothers and bi-weekly visits with the parents this frequency of interaction can be insured.

(This section applies only to day care centers & homes)

1974

Children served	Sex M	Sex F	Race B	Race W	Race O	Center	Family	Total
Infants 0-18								
Toddlers 18-36								
Preschoolers 36-60								
Primary 60 Plus								
Totals								

Staff Members	Sex M	Sex F	Race B	Race W	Race O	Prof.	Para Prof	Total
Teachers								
Aides								
Ass'ts.								
Social Workers								
Totals								

What are your staff-child ratios for:

infants: ____________

toddlers: ____________

preschoolers: ____________

Number of centers in your project:

Group: ____________

Family: ____________

1975 (Projected Figures)

Children to be Served	Sex M	Sex F	Race B	Race W	Race O	Center	Family	Total
Infants 0-18								
Toddlers 18-36								
Preschoolers 36-60								
Primary 60 Plus								
Totals								

Staff Members	Sex M	Sex F	Race B	Race W	Race O	Prof.	Para Prof	Total
Teachers								
Aides								
Ass'ts.								
Social Workers								
Totals								

What are your staff-child ratios for:

infants: ____________

toddlers: ____________

preschoolers: ____________

Number of centers in your project:

Group: ____________

Family: ____________

1974	1975 (Projected Figures)
Number of classrooms/center: ________ ________ ________ ________ ________ ________ ________ ________	Number of classrooms/center: ________ ________ ________ ________ ________ ________ ________ ________
Please provide me with a daily schedule: 8-9 Arrival & free play 9-9:15 Snack 9:15-9:30 Group time 9:30-10:15 Structured play	Please provide me with a daily schedule:
Curriculum: Would you classify your program as: Piagetian: ____________ Traditional: ____________ Behavioral Analysis: _____ Montessori: ____________ Other: ____________ (please specify)	Curriculum: Would you classify your program as: Piagetian: ____________ Traditional: ____________ Behavioral Analysis: _________ Montessori: ____________ Other: ____________ (please specify)
Define objectives of educational program in behavioral terms:	Define objectives of educational program in behavioral terms:
0-18 mos: infant to be capable to feed self large muscle coordination - climbing up ladder	0-18 mos: infant to be capable to feed self large muscle coordination - climbing up ladder stack four blocks on top of each other
18-36 mos: know colors--red, blue, yellow toilet trained one nap/day eating at childsize table	18-36 mos: know colors--red, blue, yellow toilet trained finish 4 piece puzzle stack 8 blocks on top of each other
36 mos plus: know numbers 1-10	36 mos plus: know numbers 1-20 producing 6 word sentences

1974	1975 (Projected Figures)
Indicate the % of time engaged in the following/daily activities	Indicate the % of time engaged in the following/daily activities
Structural activities ______%	Structural activities ______%
Nap ________%	Nap ________%
Outdoor play ________%	Outdoor play ________%
Free play ________%	Free play ________%
Transitions ________%	Transitiions ________%
Nutrition: Include sample menu:	Nutrition: Include sample menu:
Children served/day ________	Children served/day ________
Who does cooking: centralized kitchen _____ or not _______	Who does cooking: centralized kitchen ______ or not______
Who does the serving teacher______ child________	Who does the serving teacher________ child__________
What age are infants put on table foods _________	What age are infants put on table foods_______

B. OUTREACH INFORMATION AND REFERRAL SERVICE. Again with the aid of the planning grant, the four outreach workers were recruited and trained prior to the July 1 start-up.

1.) To inform parents of existent services for themselves and their preschool child. Through the use of daily logs the total number of families visited and types of information sought can be discerned. In 7½ months operation, 1,042 families have been visited. The most frequently asked questions are:

a) Can you tell me about family planning?
b) How can I help my children get their immunizations?
c) Which doctors take the medical card?

2.) To provide referral for preschool parents to the appropriate agencies needed by the family. Presently ten of the twelve preschool related agencies in the county are being used for referrals. The other two are of specific religious affiliations and none of the families visited fit their criteria for service useage.

3.) To coordinate referral to the various agencies, thereby eliminating duplication of effort. Through bi-weekly meetings between appropriate agency representatives, areas where duplication exists are explored and eliminated where possible. A survey of what each agency offers is presently being developed. This will be studied to find out where severe duplication exists and can be eliminated.

4.) To provide follow-up to cases that have been referred to ensure that service has been rendered. Of the 1,042 families visited, 532 have been revisited at least once. Of those revisited 417 (or 78%) went to the agency referred.

(This section applies only to information & referral)

1974	1975 (Projected figures)
Caseload:	Caseload:
Total ________ cases for all counties & caseworkers	Total ________ cases for all counties & caseworkers
County ________ Caseworker ________	County ________ Caseworker ________
County ________ Caseworker ________	County ________ Caseworker ________
County ________ Caseworker ________	County ________ Caseworker ________
County ________ Caseworker ________	County ________ Caseworker ________
Home visits:	Home visits:
Total: ________	Total: ________
Per county: ________	Per county: ________
Per caseworker: ________	Per caseworker: ________
Per month: ________	Per month: ________
Children screened:	Children screened:
Total: ________	Total: ________
Per county: ________	Per county: ________
Per case worker: ________	Per caseworker: ________
Per month: ________	Per month: ________

1974	1975 (Projected figures)
Children Re-screened:	
Total:__________	
Children detected as abnormal:	
Total: ________	
Per county: __________	
Referrals:	
Total:_________	
Medical: ________	
Dental: _________	
Pediatric: _______	
Vision: ___________	
Speech: ___________	
Hearing: __________	
Orthopedic:_________	
Neurological _______	
Psychological: ______	
Public Health: ______	
Day Nursery: ________	
Treatments:	
Total: _________	
Medical: ________	
Dental: _________	
Pediatrician: _______	
Vision: ________	
Speech: _________	

1974	1975 (Projected figures)
Treatments: (cont.) Hearing: __________ Orthopedic: _________ Neurological: _________ Psychological: _________ Public Health: __________ Day Nursery: _____________	
Follow-ups: _______________________	

C. FAMILY PLANNING CLINIC. The needs assessment established a definite desire or this type of service. The planning grant enabled the director to locate a facility and recruit a physician, nurse and aide. Appropriate training was also given during this planning stage. Consequently, the program began operation July 1, 1974. There was and still is opposition from certain religious groups but it has not affected program operations.

1.) Increase access to family planning services for those people for whom these services were not available in the past. The establishment of the clinic plus the 250 referrals from the outreach workers has aided in accomplishing this goal.

2.) To establish a pregnancy and V.D. counseling component to aide individuals in family planning matters. The nurse has had six weeks inservice training regarding family planning techniques, V.D. and various psychological problems encountered with utilization of different birth control methods. With the assistance of the physician a counseling program has been established with 150 persons having taken advantage of its services.

3.) Community awareness of the services offered. This has been accomplished through weekly community service ads on radio and T.V. plus monthly articles in the local paper, monthly talks to local organizations and utilization of outreach workers.

4.) To provide family planning services to 500 people during the first year of operation. To date 300 individuals have been seen and used the clinic's facilities.

(This section applies only to family planning clinics)

1974	1975 (Projected figures)
Caseload: Total: ______	Caseload: Total: ______
County: ______	County: ______
County: ______	County: ______
County: ______	County: ______
Counseling: ______	
Referral: ______	
Medical: ______	
No. of clinics: ______	
Family Planning Educ.: ______	
V. D. Screening ______	
V. D. Treatment ______	

D. This section applies to all projects. Fill out accordingly.

1974	1975
Psychological Services:	
Who does it: Name: ______	Who does it: Name: ______
Degree: ______	Degree: ______
How often: ______	How often: ______
What is the purpose ______	What is the purpose ______

1974	1975
Health Services:	
Who does it:	Who does it:
Name: ____________	Name: ____________
Degree: ________	Degree: ________
How often: ________	How often: ________
What is the purpose ________	What is the purpose ________
Dental Services:	
Who does it:	Who does it:
Name: ____________	Name: ____________
Degree: ________	Degree: ________
How often: ________	How often: ________
What is the purpose ________	What is the purpose ________
Speech and Hearing Services	
Who does it:	Who does it:
Name: ____________	Name: ____________
Degree: ________	Degree: ________
How often: ________	How often: ________
What is the purpose ________	What is the purpose ________
Other Services:	
Who does it:	
How often:	
What is the purpose:	

III. PROGRAM PROBLEM AREAS AND SOLUTIONS

Although the program has been accepted into the community, lack of financial community support is evident. A Consumer Advisory Council (CAC) has been formed to assist in policy making and fund raising. To date, their fund raising techniques have netted $2,015 or 1% of the program cost. Consequently other funding avenues are being explored e.g. the Neighborhood Assistance Act.

An internal and external continuous evaluation of the program has been established. The evaluation criteria and questionnaires which were submitted with the original proposal are still in use, although one of the goals for this year is to refine the evaluational instrument. According to the evaluational material, the program has shown positive strides in the areas of informational disbursement, referrals, coordination of services with various agencies, developmental progress of preschoolers, infants and toodlers, and increases in use of family planning services. It can also be seen that more work must be done in the areas of community impact, local share and inservice training.

In terms of program management, it should be noted that several positions (1 social service coordinator, 1 educational coordinator, and 1 family day care coordinator) have been eliminated on the new budget. This was due to the evaluation showing that these positions caused an overstaffing pattern. According to staff evaluations of administration, although there are minor areas of disagreement with policy, overall they are comfortable with administrative decisions.

IV. CURRENT PROPOSAL GOALS & OBJECTIVES

The project for the coming year will:

A. Maintain 20 IV-A eligible and 10 fee paying children.

B. Continue testing each child.

C. Maintain the 20 children in the family day care homes.

D. Continue the 4 hour workshops every other Saturday.

E. Have the outreach workers visit 1700 families in 12 months.

F. Continue bi-weekly meetings between agency representatives.

G. Continue follow-up of all families visited.

H. Have the family planning clinic see 400 new clients in 12 months.

I. Provide counseling for at least 200 clients utilizing the family planning clinic.

J. Continue the weekly public service ads on radio and T.V. plus monthly articles in the local paper.

Those goals that have not been met will continue to be pursued. However, the evaluation has shown several areas for change: (Note: again, due to the size of this model program only two continuation goals will be used as examples.)

1. More emphasis on gaining community support must be given. This will be accomplished by:

A. During the first three months of the new project year thirty community service ads will be shown over the local T.V. station.

B. At least two community organizations per month will be approached for a talk on this subject.

C. The C.A.C. will become more involved in community awareness through participation in the annual grange fair, fund raising drives and having at least one consumer accompany the director on each speaking engagement.

D. Over the new funding year, at least two informational articles per month will be placed in the local newspaper.

2. Means for project financial self-sufficiency must be explored and expanded. This will be accomplished by:

A. The C.A.C. will have at least four fund raising drives this fiscal year with one of these being a big name group benefit show. This should attract people from the neighboring counties.

B. Utilization of the Neighborhood Assistance Act. A 501(c) (3) certificate was just obtained and a proposal for $75,000 is in the process of being written.

Industries contacted for contributions are:

1) Hedstrom - commitment of $5,000
2) Bethlehem Streel - commitment of $10,000
3) Leedon's Rug Mfg. - commitment of $2,000
4) Johnnie's Fish Cannery - commitment of $1,500.

Verbal contributions are presently being obtained from other sources. Letters of commitment have been obtained on the above. A copy of all letters of commitment will be sent to you in two months or upon completion of the solicitation drive, whichever comes first.

State Act 54 will provide $12,000 for local match. Title XIX screenings will produce $10,200 fees for local share to be used this year. The EPSDT screenings have already been established for the year that will guarantee this figure.

V. CONCLUSION

As can be seen, the overall project has been partially accepted by the community and its component parts are in operation. It is hoped that through the evaluation process and the work of the C.A.C. that the project will continue to give quality service in a cost-effective manner. The continuation budget reflects this cost-effective approach. The second year funding by ARC for this program will help in its effort to provide quality services and to become self-sufficient by the end of year three.

Along with all the child development data we are obtaining on the Projects, we also have standardized the fiscal information. The following forms are used on a monthly basis. This is a record of actual expenditures which gets plugged into EMIS on a monthly basis so that we can compute unit costs on a monthly as well as quarterly basis.

This information along with the data gathered with the child development profiles and flow sheets are put into the formulas for calculating the unit-cost coefficient.

DRAFT

INSTRUCTIONS FOR PREPARING MONTHLY REPORT

Item 1. Enter the name and complete mailing address, including the ZIP code for the grantee organization.

Item 2. Enter the type of program, i.e. Child Development, Information & Referral. Number and ages of consumers served.

Item 3. Enter the account number that appears on your Notice of Grant Award.

Item 4. Enter the month, day, and year of the beginning and ending dates of this project period.

Item 5. Enter the month, day, and year of the beginning and ending dates of the period for which this report is prepared.

Item 6A. Enter the balance of funds on hand from previous awards.

Item 6B. Enter the amount of ARC funds received from grants management for the period covered by this report.

Item 6C. Enter the amount of fees collected during the period covered by this report.

Item 6D. Enter the proper figure to make any necessary adjustments.

Item 6E. Enter the total amount of ARC funds (including fees) that are available for expenditure during the period covered by this report.

Item 7A-G Enter the actual amounts of funds expended from all funding sources, including the percentages of funds charged to each funding source.

Item 8. Enter the total amount of actual expenditures from all funding sources and place these expenditures in their proper categories.

STATE AGENCY	2. Type of program - numbers & ages of consumers
Commonwealth Child Development Committee ARC Child Development Actual Monthly Expenditures	
1. Name and Address of Grantee	3. Grant number 4. Project Period from through 5. Portion of project period covered b this report from through

6. Funds available for this portion of project period

A. Balance from Previous Awards	$
B. ARC funds awarded during this portion	$
C. Fees credited to ARC account	$
D. Adjustments	$
E. Total funds available for expenditure (6A-6D)	$

7. Actual expenditures for this portion of project period

CATEGORIES	% of local share	% of other Fed. funds	% of ARC funds	Total fun expended
A. Personnel				
B. Consultant & Contract				
C. Travel				
D. Supplies				
E. Space				
F. Equipment				
G. Other Costs				
. Total Expenditures				

The following chart is on Working Parents which shows the amount of monies that have been put back into a county through tax dollars because of day care programs. I think it is rather evident that it is a boost to the county's economy.

This type of information is definitely something that a project wants to provide to his county commissioners. Political leaders are always concerned, especially with the state of the economy, with the number of people that are employed. Day care provides us with a double-edged sword. It not only employs the teachers and administrators, but it helps the employment of the mothers and fathers of the children who leave their children at the center. This is a very potent weapon that must be pointed out to political leaders. And let's not forget the mothers and fathers of the children do vote. That's political clout!

Chart # 1

WORKING PARENTS DATA

THE AMOUNT OF INCOME PUT BACK INTO THE COUNTY BECAUSE OF DAY CARE

820	LUZERNE	2,898,000		
15	CARBON	52,500		
500	SCHULYKILL	1,750,000		
		4,700,500		
	MIFFLIN	310,00------------	310,000	
	BRADFORD	1,600,000-----------	1,600,000	
	SULLIVAN	30,000-----------	30,000	
	HUNTINGTON	315,000		
	BLAIR	840,000		
	CAMBRIA	304,500		
		1,459,000		
15	ALLEGHENY	52,500		
		$6,181,000	$2,000,000	$ 8,181,000

Through EMIS we also wanted to find out how satisfied the consumers were with the programs. As one can see, they were rather pleased. We gathered these data through questionnaires that were sent to the clients' homes and were sent back to us anonymously. Please see Appendix 5 for a sample of the questionnaire used.

The survey was done just a bit over 35% of all our projects. We had a reture rate of about 80% of the questionnaires.

Chart # 2

CONSUMER QUESTIONAIRE

Number of day care programs responding — 30%
(New form developed, first form too superficial)

Number of information and referral programs responding —71%

Percentage of negative responses for information and referral programs — 11%

Percentage of negative responses for day care programs — 8%

Y=yes--positive responses

N=no---negative responses

Information and Referral Projects

Questions	1		2		3		4		N	N total	% of total
Yes/No	Y	N	Y	N	Y	N	Y	N			
Responses	40	4	43	2	43	2	34	11	36	140	30%
Responses	87%		93%		93%		74%				
Levels of significance	$p<.001$		$p<.001$		$p<.001$		$p<.001$				

Day Care Projects

Questions	1		2		3		4		5		6		N	N total	% of total
Yes/No	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N			
Responses	22	0	22	0	22	0	22	0	17	5	16	6	22	60	43%
+Responses	100%		100%		100%		100%		77%		73%				
Levels of Significance	$p<.001$		$p<.001$		$p<.001$		$p<.001$		$p<.05$		$p<.10$				

I think by now it has become apparent that the projects had a great deal of data and information to keep up with between us at the state level, the fed's and the local community. In order to make the job a little easier for them and for us, I developed an overall flow sheet which showed when everything was due in our office, in Washington, or in Philadelphia.

Chart # 3 is an example of such an overall flow sheet.

The chart contains all the critical forms and when they need to be sent to us. Copies of this form are kept both in the operating agency's office as well as in the state office. This is done so that there will be no confusion on anyone's part concerning when everything is due.

The first item is when the combination proposal is due. 601-T and 602-T are the forms from the fed's. Monthly and quarterly narratives are both due at the state and federal level.

Chart # 3

OVERALL ORGANIZATION SHEET--COPY OF EACH IS KEPT IN STATE OFFICE AND IN OPERATING AGENCY OFFICE

PROJECT ____________ FY ________ FUNDING DATE ________

MONTHS	J	F	M	A	M	J	J	A	S	O	N	D	
CONTIN. PROPOSAL					STATE		WASH.						
601 T									XX				
MONTHLY NARRATIVE	M	M		M	M		M	M		M	M		STATE HEW
QUATERLY NARRATIVE			Q			Q			Q			Q	STATE HEW
602 T	M	M	M	M	M	M	M	M	M	M	M	M	STATE HEW
VISITS			S R T							S R T			
OTHER FORMS	SNA		PQ	ONF	DSL	PRQ		WPQ	CDP		FS	CDP	

SNA=STAFF NEEDS ASSESSMENT
PQ=PARENT QUESTIONAIRE
ONF=OVERALL NEWSLETTER FORM
DSL=DATA SHEET LETTER
PRQ=PRGRAM QUESTIONAIRE
WPQ=WORKING PARENTS QUESTIONAIRE
CDP=CHILD DEVELOPMENT PROFILE
FS=FLOW SHEET

CHAPTER 5

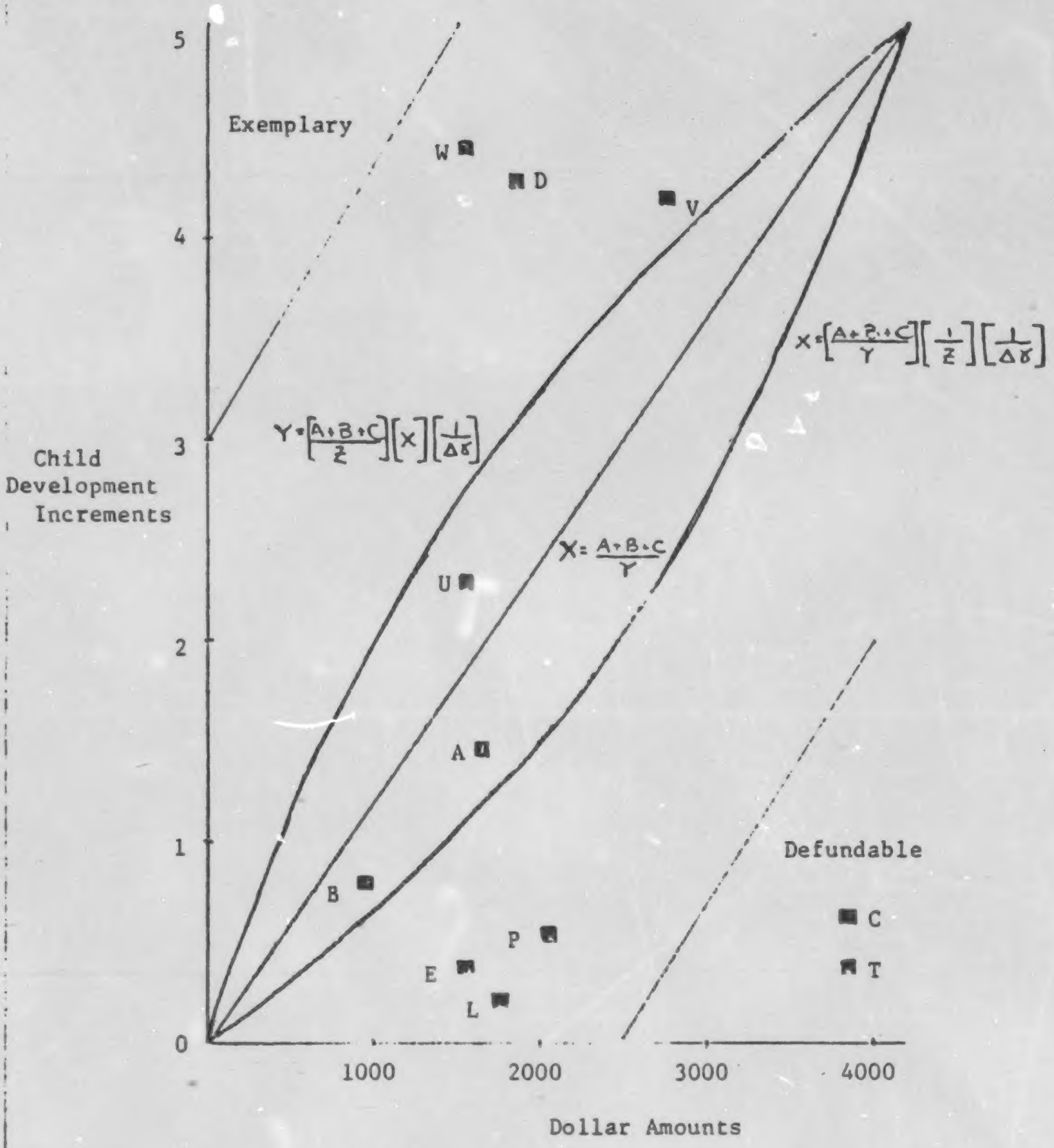
ON GOING RESEARCH AND FUTURE REPORTS

One of the strongest criterion in measuring any child development program from a management point of view, is it's unit cost. Usually in computing any unit cost, most managers take the total cost and divide by the total enrollment. This calculation in practically all cases is doing a tremendous disservice to the programs. What follows is a set of formulas and graphs that were computed using weighted means. These formulas take into account the child's development while in the program. These are included in the formula as child development increments. Also, weighted means are included in the formula regarding the services provided the clients. All of these are put into the formulas along with total cost and then a unit cost is figured. A simultaneous equation approach similar to the one used by Hu (1971) in determining the cost effectiveness of child health and welfare programs.

In the evaluations of Graph # 1, A,B, and C are finding sources. Y is the number of clients, $\Delta\gamma$ is the child development increment score, z are the superfluous unit costs provided, such as transportation, etc. The center line in Graph # 1 is the typical cost analysis coefficient computation. Equations $Y = \left[\frac{A+B+C}{z}\right] \left[X\right] \left[\frac{1}{\Delta\gamma}\right] + X \left[\frac{A+B+C}{Y}\right] \left[\frac{1}{z}\right] \left[\frac{1}{\Delta\gamma}\right]$ are the limits of acceptability. Obviously there is more variability and leeway using the latter formulas.

Graph # 1

Cost Analysis Coefficients Computed As Linear Relations -- Shift in Efficiency Level Using Weighted Child Development Scale (1-5)



The following chart and graph are summaries both demographically and experimentally regarding an ecological research study presently being conducted. The chart lists all demographic data.

The graph is analyzing the amount of verbalizing of children with adults and peers. This study is a follow-up and extension to the studies done on movement and verbalization levels reported on in Chapter 2. This study confirms the results obtained there, but with a younger age group. As movement(random) to and from areas(non-goal specific) decreases, verbalizations increase. It is not only a strict relationship between movement and language as has been suggested, but the type of movement. Purposeful movement stays consistent throughout. It is random movement that falls off.

Graph # 2

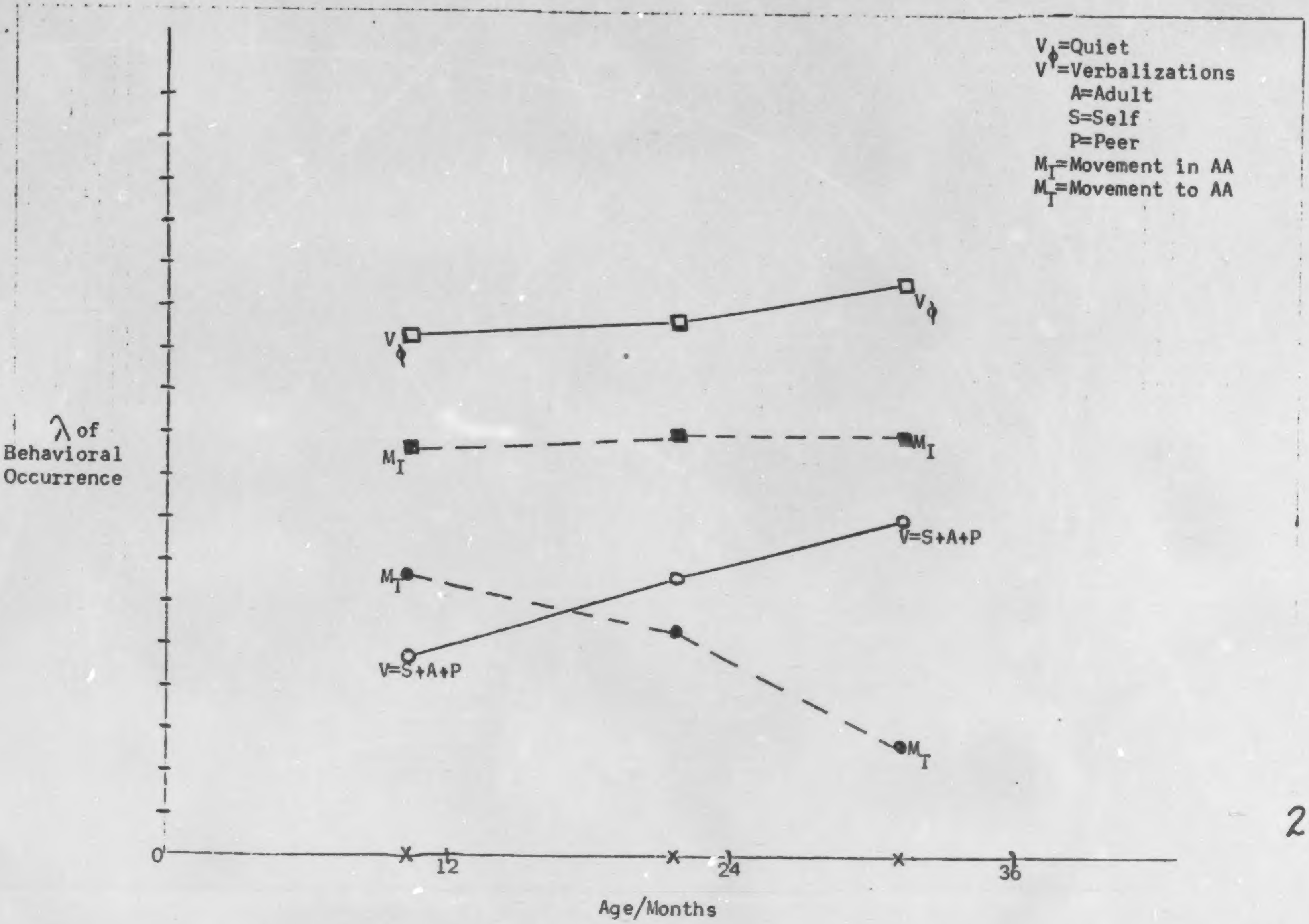

V_ϕ=Quiet
V=Verbalizations
A=Adult
S=Self
P=Peer
M_I=Movement in AA
M_I=Movement to AA
λ of Behavioral Occurrence
V_ϕ
V_ϕ
M_I
M_I
M_I
M_I
V=S+A+P
V=S+A+P
0
12
24
36
Age/Months

Chart # 1

DEMOGRAPHIC INFORMATION

Infant/Toddler Program--Luzerne Co

1. Number of children - Total	N=107	
2. Number of children by age group:		
a. under 1 yr.	8	7%
b. 1-2 yrs.	40	37%
c. 2-3 yrs.	53	50%
d. 3-4 yrs.	4	4%
e. 4-5 yrs.	2	2%
f. over 5 yrs.	0	0%
3. Number of:		
a. females	45	42%
b. males	62	58%
4. Number of:		
a. Blacks	4	4%
b. Caucasians	103	96%
c. Others	0	0%
5. Family Position:		
a. Oldest	5	5%
b. Youngest	53	50%
c. Middle	1	1%
d. Only	47	44%
6. Number having:		
a. 1 Parent in Home	43	40%
b. 2 Parents in Home	64	60%
c. 1 Parent Outside Home	16	15%
d. 2 Parents Outside Home	0	0%

7. Number of Siblings:

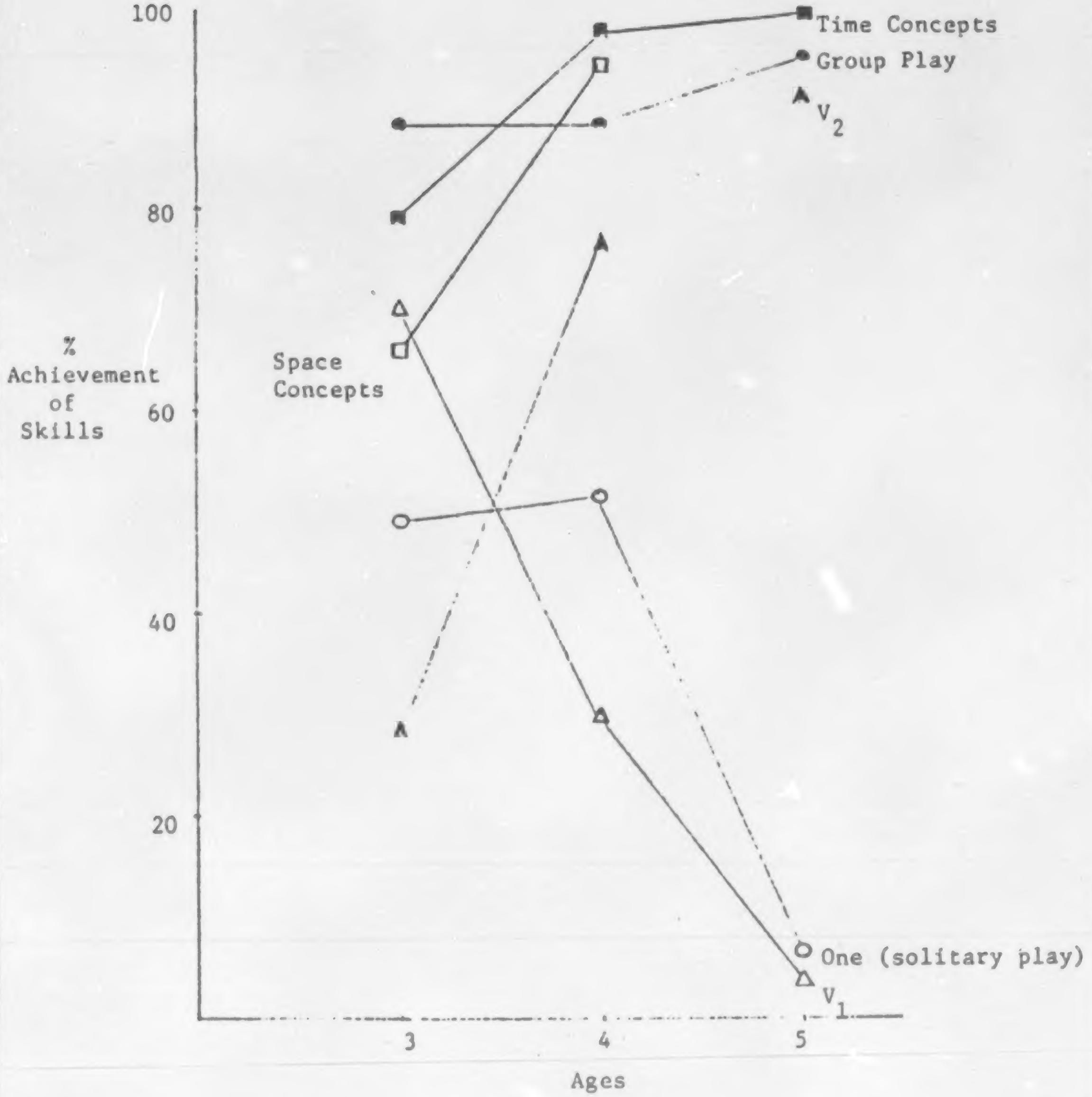
a. 0	47	44%
b. 1	38	36%
c. 2	8	7%
d. 3	11	10%
e. 4	3	3%
f. 5+	0	0%

8. Average length of time in center (Mean) 7.09 months

This graph breaks down the direction of verbalizations and the sophistication of verbalizations across activity areas. V_1 stands for simple verbalizations and V_2 stands for complex verbalizations. These data, in particular the data on verbalizations and play patterns, help to support data from the theoretical base presented in Chapter 2.

Graph # 3

Developmental Scheme for Language and Cognitive Growth for Preschool Children Enrolled in Day Care



The Pearson R correlations and accompanying charts are a further extension of the ecological studies done on activity areas In this chart, various verbal and cognitive criteria are being analyzed. Let me point out some of the high lights. On page 239, play by self for 3-4 and 4-5 are significant. Play by self v.s. play in groups at age 3 is significant. There are some very interesting trends especially on page 238 regarding the verbal criteria, the complex verbalization for 3-4 year olds and simple verbalization for 3-4 and 3-5 year olds.

In planning any curriculum, these data should be taken into consideration regarding how children verbalize at different age ranges, and how they play. Planning for different size groups for part of the day is important so that children can experience the various interactional patterns in the groups and practice coping skills.

Chart # 2

PEARSON-R CORRELATIONS

Group 1--C.D.Council of N.E.Pa.
Group 2--Mifflin Co. Day Care
Group 3--Comprehensive Day Care Program for Carbon Co.
Group 4--Columbia Day Care

VARIABLES	CRITICAL R VALUE (at .05 significance level)	OBSERVED R VALUE	SIGNIFICANT OR NOT SIGNIFICANT
1. Simple Verbalizations (V_1)			
a. x=age 3 y=age 4	± .9500	-.5726	N.S.
b. x=age 4 y=age 5	± .9500	+.1000	$p > .05$
c. x=age 3 y=age 5	± .9500	-.5712	N.S.
2. Complex Verbalizations (V_2)			
a. x=age 3 y=age 4	± .9500	+.9178	N.S.
3. Simple Verbalizations v.s. Complex Verbalizations			
a. age 3 $x=V_1$ $y=V_2$	± .9500	+.4798	N.S.
b. age 4 $x=V_1$ $y=V_2$	± .9500	-.3333	N.S.
4. Verbalization with Peers			
a. x=age 3 y=age 4	± .9500	+.8493	N.S.
5. Discrimination between large and small			
a. x=age 3 y=age 4	± .9500	-.0651	N.S.
b. x=age 4 y=age 5	± .9500	+.1000	$p > .05$
c. x=age 3 y=age 5	± .9500	-.0651	N.S.

VARIABLES	CRITICAL R VALUE (at .05 significance level)	OBSERVED R VALUE	SIGNIFICANT OR NOT SIGNIFICANT
6. Discrimination of Colors			
a. x=age 3 y=age 4	± .9500	+.7564	N.S.
b. x=age 4 y=age 5	± .9500	+.3072	N.S.
c. x=age3 y=age 5	± .9500	-.1149	N.S.
7. Knowledge of numbers (1-10)			
a. x=age 3 y=age 4	± .9500	-.9125	N.S.
b. x=age 4 y=age 5	± .9500	+.7857	N.S.
c. x=age 3 y=age 5	± .9500	-.8019	N.S.
8. Play by self			
a. x=age 3 y=age 4	± .9500	+.9870	p>.05
b. x=age 4 y=age 5	± .9500	+.9731	p>.05
c. x=age 3 y=age 5	± .9500	+.9238	N.S.
9. Play in groups			
a. x=age 3 y=age 5	± .9500	-.0133	N.S.
10. Play by self v.s. play in groups			
a. age 3 x = Self y=Groups	± .9500	+ .9940	p>.05
b. age 5 x=Self y=Groups	±.9500	+.4516	N.S.
11. Goes to toilet by self			
a. x=age 3 y= age 4	± .9500	+ .8570	N.S.
b. x=age 4 y=age 5	± .9500	-.3333	N.S.

VARIABLES	CRITICAL R VALUE (at .05 significance level)	OBSERVED R VALUE	SIGNIFICANT OR NOT SIGNIFICANT
c. x=age 3 y=age 5	± .9500	-.2960	N.S.
12. Use Scissors a. x=age 3 y=age 4	± .9500	+.9518	p> .05
13. Stack 8 blocks a. x=age 3 y=age 4	± .9500	+.7610	N.S.

The following data involves information and referral programs. The summary statistics found in Chart # 3 and # 4 are the results of the flow sheets developed and presented in Chapter 1. Remember this is where we took 10 forms and condensed all the forms into one form. This activity helped the projects as much as it helped us at the state level. Some high lights include the differential mean between initial contact and the data of termination. 54.78 is closer to the national average. The other data from Chart # 4 are out of line with the national average. This fact was pointed out to the project director.

Chart #$_3$--SCAN

Item	Potter County	Cameron County	Elk County	McKean County	TOTAL - 4 counties
1. # of students	163	208	261	199	786 = N
2. # home visits	361	362	439	274	1,436 -- average 1
3. # refusals	1	3	7	26	37 -- 5%
4. flow sheets	154	202	203	153	749 -- 95%
5. AFDC recipients	42	60	40	80	222 -- 28%
6. progress summaries	150	195	205	113	663 -- 84%
7. screening	135	197	205	148	685 -- 87%
8. re-screening	47	47	42	49	185 -- 24%
9. other screening	1	5	13	1	20 -- 3%
10. abnormalities	53	38	43	22	156 -- 20%
11. case conference	26	16	20	17	105 -- 13%
12. reports sent	9	2	16	18	45 -- 6%
13. medical - passed	100	152	188	115	555 -- 71%
P.H.	39	33	3	17	392 -- 50%
Ch. S.	0	0	0	4	4 -- 1%
in treatment	6	4	3	5	18 -- 2%
treatment completed	1	1	3	18	23 -- 3%
14. dental - passed	35	60	109	113	317 -- 40%
P.H.	0	0	0	1	1 -- .01%
Ch. S.	0	0	0	4	4 -- 1%
in treatment	30	1	11	20	62 -- 8%
treatment completed	23	31	0	2	56 -- 7%
15. pediatrics - in					3 -- .04%
treatment	2	1	0	parent = 1	(parent = 1)
treatment completed	0	2	5		7 -- 1%
16. vision-in treatment	15	5	4	6	30 -- 4%
treatment completed	6	15	7	6	34 -- 4%
17. speech - in treatment	20	14	12	6	52 -- 7%
treatment completed	10	3	12	5	30 -- 4%
18. hearing - in treatment	11	2	2	6	21 -- 3%
treatment completed	1	4	2	1	8 -- 1%
19. personal/social					
in treatment	1	2	4	0	7 -- 1%
treatment completed	1	3	4	1	9 -- 1%
20. fine motor-in treatment	6	1	2	1	10 -- 1%
treatment completed	4	1	1	0	6 -- 1%
21. language-in treatment	4	4	2	1	11 -- 1%
treatment completed	3	3	4	0	10 -- 1%
22. gross motor-in treatment	6	5	1	1	13 -- 2%
treatment completed	3	1	0	0	4 -- 1%
23. orthopedics-in treatment	0	1	1	1	3 -- .04%
treatment completed	4	1	3	1	9 -- 1%
24. neurological-in treatmt	0	1	0	0	1 -- .01%
treatment completed	0	1	0	0	1 -- .01%
25. psychological-in treat.	0	0	1	5	6 -- 1%
treatment completed	4	2	7	5	18 -- 2%
26. public health-in treat.	0	5	0	2	7 -- 1%
treatment completed	44	25	3	14	86 -- 11%
27. day programs - in treat	3	11	5	1	20 -- 3%
treatment completed	6	9	7	1	23 -- 3%

28. other referral	1	0	1	3	5 -- 1%
29. referral refusal	4	2	6	8	20 -- 3%
30. abnormalities conf.	34	23	21	17	95 -- 12%
31. follow-up	38	57	58	74	227 -- 29%
32. waiting list	0	1	9	0	10 -- 1%
33. termination	108	187	208	170	673 -- 86%
34. 2nd rescreening	0	5	1	0	6 -- 1%
35. Head Start - x	14	14	H.S. not	41	69 -- 9%
sib	6	12	listed	29	47 -- 6%
36. foster day care	--	--	--	2	2 -- .03%

Differentials between Date of Initial Contact and Date of Termination:

County	Differential Mean (as measured in days)
1. Cameron County	55.84
2. Elk County	28.15
3. McKean County	57.21
4. Potter County	77.92
	54.78

Chart # 4

Item	Frear	Davidson	Marshall	Lynn	Smith	Hackney	Totals
1. # of students	107	108	20	30	130	80	475 = N
2. initial visits made	97	108	20	30	130	80	465 = 98%
3. Bedford Co Growth & Dev.	4	5	2	0	1	0	12 = 3%
4. Screening	3	13	0	0	2	5	23 = 5%
5. Blair Dental Clinic	6	15	0	7	5	1	34 = 7%
6. Broad Top Med Clinic	0	1	0	1	0	0	2 = .4%
7. Child Care	0	0	0	0	0	1	1 = .2%
8. Transportation	4	0	0	1	3	3	11 = 2%
9. Day Care	4	1	1	3	1	2	12 = 3%
10. Exceptional Child.	3	0	0	0	1	1	5 = 1%
11. Dept of Public Assist.	1	0	1	4	0	0	6 = 1%
12. Easter Seal	0	2	0	0	4	1	7 = 2%
13. Expectant Parent Class	1	0	0	0	3	2	6 = 1%
14. Family Planning	28	27	2	8	26	16	107 = 23%
15. Head Start	1	0	0	1	2	4	8 = 2%
16. Legal Services	2	2	0	0	0	0	4 = 1%
17. MH/MR	2	0	0	0	0	2	4 = 1%
18. Nutrition Aides	0	0	0	1	0	3	4 = 1%
19. Vision	0	0	0	0	0	0	0 = 0%
20. Opthamologist	3	0	0	0	2	3	8 = 2%
21. Pediatrician	48	43	3	19	27	11	151 = 32%
22. Orthopedics	1	0	0	0	2	1	4 = 1%
23. Kindergarten/ Nurseries	1	0	0	1	1	0	3 = 1%
.. Public Health	50	41	2	0	44	4	141 = 30%
25. School Nurse	0	0	0	0	0	3	3 = 1%
26. Speech/Hearing	0	0	0	1	0	0	1 = .2%
27. WIC	17	29	8	1	10	4	69 = 15%
28. Home Nurse	0	0	0	0	0	0	0 = 0%
29. I.U.	0	0	0	0	3	0	3 = 1%
30. Specialists	0	0	0	0	1	2	3 = 1%
31. Follow-Up	36	57	12	0	23	41	169 = 36%
32. # of terminations	0	30	5	0	0	0	35 = 7%

Differential between Date of Intiial Contact and
Date of Termination -- average = 74.17 days

Probably the most significant form developed through EMIS was the new child development profile. The form is self-explanatory. The reason this form was developed was as follows: it appeared that the forms the programs were using were typically useless check-lists. There was a need for a tool that would help us make decisions for an ecological based curriculum. Therefore, I developed this experimental flow sheet or child development profile.

There are two forms: the first is for the two year old and above and the second is for children under two years of age.

The purpose of the forms as restated in Chapter2, is to study more closely the phenomenon of free-play. The reason for this is simple; most programs spend from 50-80% of their day in free-play. With children spending that much time in such a demeanor, I think we better get a more effective handle on it. That is the purpose of this form.

COMMONWEALTH OF PENNSYLVANIA
GOVERNOR'S OFFICE
OFFICE FOR HUMAN RESOURCES
500 STATE STREET BLDG.
N.W. CORNER THIRD & STATE STREETS
HARRISBURG, PA. 17101

Dear

Enclosed please find the experimental child development profile we talked about. Hopefully, this instrument will enable you to better organize and document exactly what is occurring in free play.

Before describing what has been entered on the form, let me explain the various symbols and also how to abbreviate the notations for activity areas.

(see attached sheet)

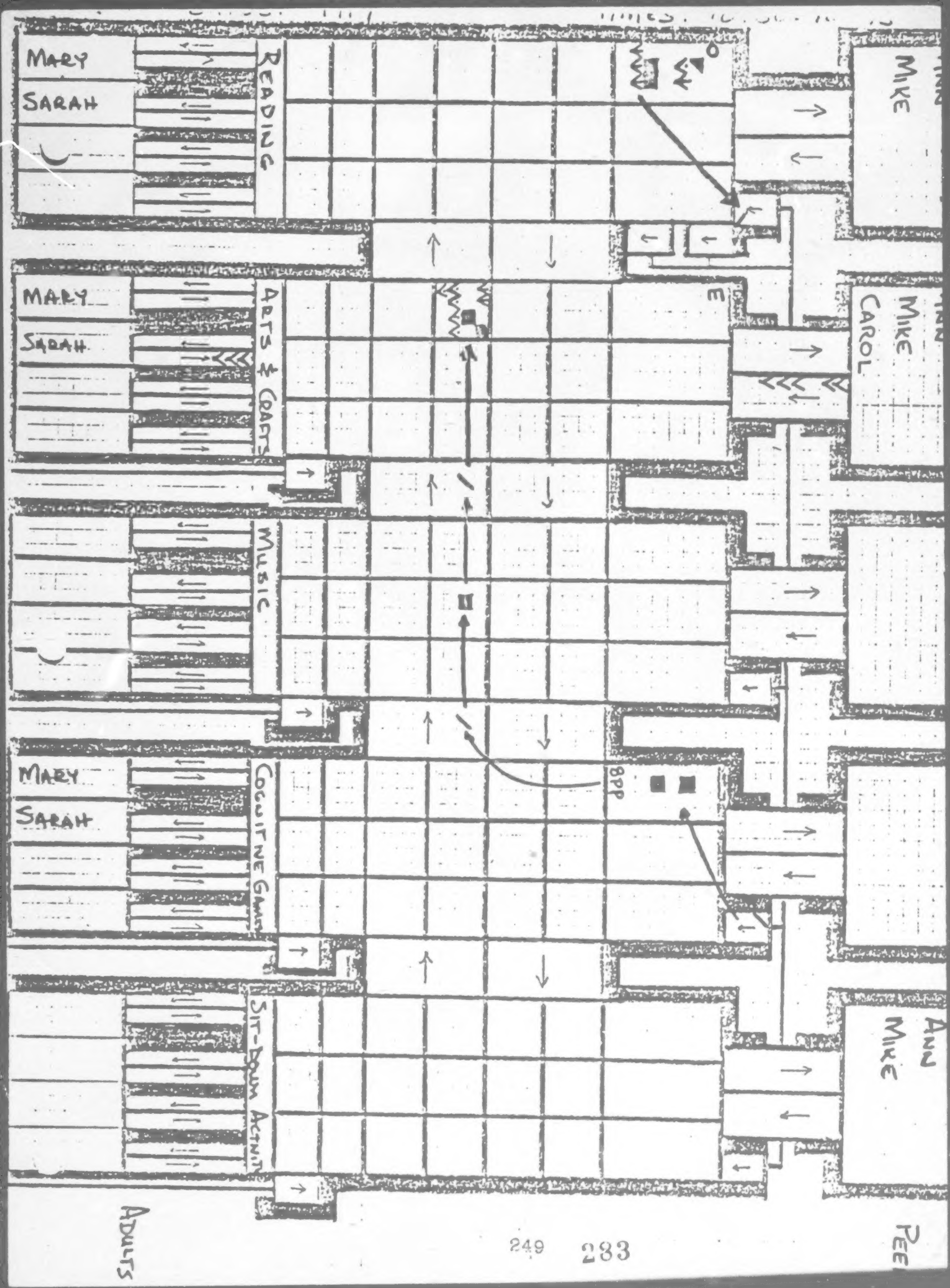
Symbol	Explanation
V̇	Talk to peer
↓	Talk to adult
◤	Start an activity
/	Behavioral occurrence
■	Completion of an activity
M	Movement
→	Direction of behavior
✱	Termination of observation
o	Initiation of observation
↔	Bi-directional

For abbreviation purposes, make eight piece puzzle = 8PP; Easel = E; Bed = B; etc.

Now, let's take a look at the form.

First: Somewhere on the left hand side write the name of the child, date of the observation and the time of the observation.

Second: The observation begins with the child in the Reading corner, notice (○), initiates an activity (◤), reading a book, verbalizes to peer (v̈) and then an adult (↓), completes two other books (■, ■), verbalizes three more times to adult (↓, ↓, ↓) then moves out of activity area (→/) and goes to the cognitive games area (/), does puzzle (■) puzzle (■), moves to music area (/←) completes activity (■) moves to arts & crafts (/←) completes activity (■) verbalizes to peer (v̈, v̈) talks with Ann, Carol & Mike, they respond back (∨, ∨, ∨, ∨, ∨, etc), he responds (v̇, v̇, v̇) talks with adult (↓, ↓) adult (Sarah) responds (∨, ∨, ∨) completes activity (■), etc.


MARY
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COGNITIVE GAMES
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SIT-DOWN ACTIVITY
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MIKE
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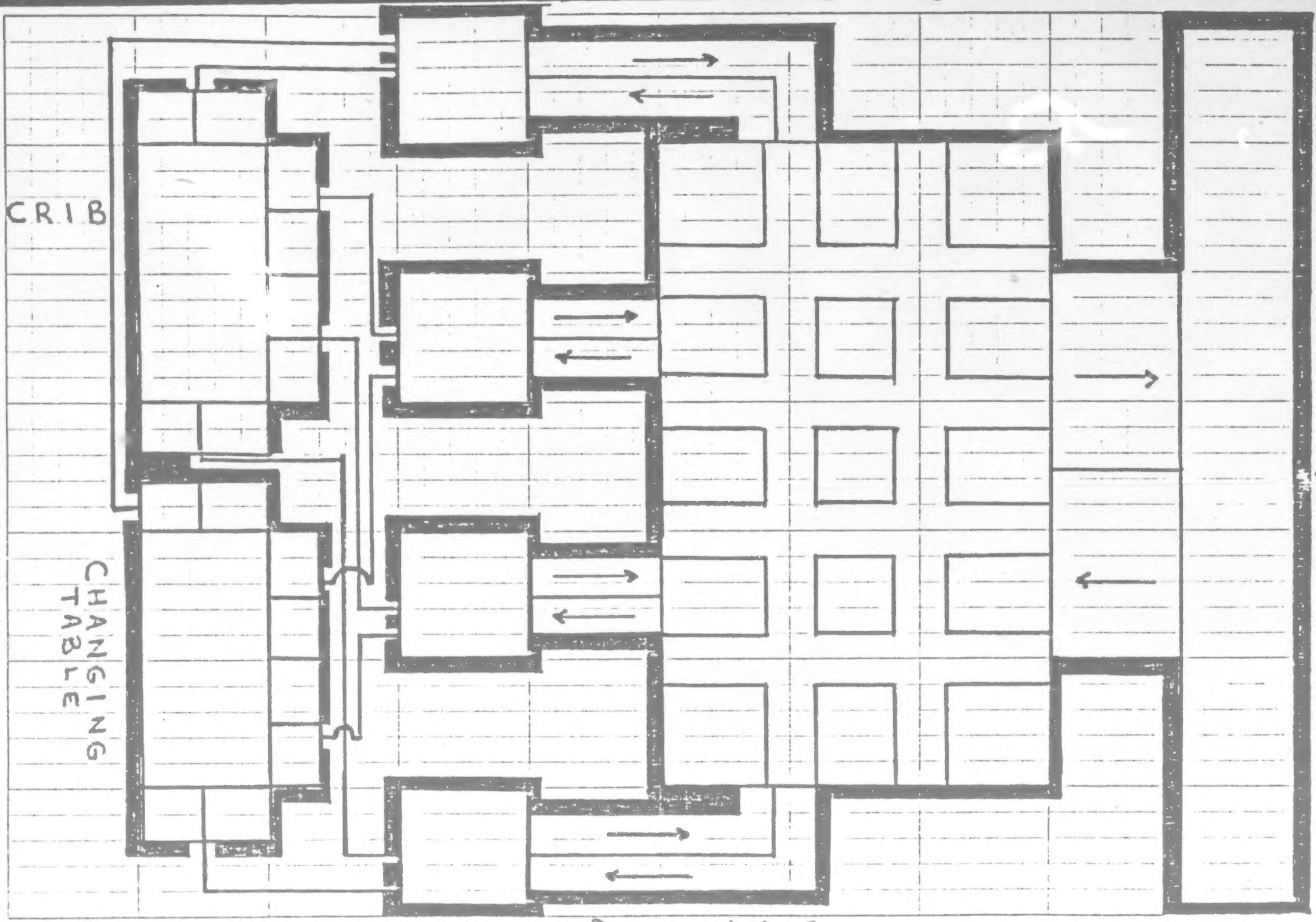
PEE

If there are any questions on this, please don't hesitate to contact me.

Sincerely yours,

RJF:pc


CRIB
CHANGING TABLE

EMIS -- ECOLOGICAL CDP -- 0-24 MOS

FIENE, 9/75

Now that I have described the research that is currently being conducted through EMIS, let me turn to the future research and try to conclude this chapter. With a strong base ecologically, there are a number of avenues we can follow. One is the following article which is based on a time and space continuance a la physics. This is included more for it's heuristic value than anything else. A second avenue of research tying the R.C.P. theory together with an ecological framework is the I.R.T.--Inte[illegible]ctional Reaction Time, which is a time/space measurement of verbal and social interaction of adults and children. Another avenue is the continued validation of the naturalistic research.

All of the above will be available under separate covers in future monographs produced through EMIS.

Other research studies will look at the effect of group size on vertical grouping and how the transition from home to day care setting and vice versa affects the child's subsequent immediate interactions.

THE ROLE OF RELATIVITY IN PERCEPTION A NEW CONCEPTUAL FRAMEWORK FOR ANALYZING CHILD DEVELOPMENT INCREMENTS: AN INTRODUCTION

Abstract

A child between birth and age eleven takes in his world through a perceptual modality. All learning through inputs/outputs is transmitted in perceptual terms. Piaget (1932, 1949) addresses the issue of perception in the developing child but only in terms of a descriptive analysis. Hopefully within this paper, I will begin to explain the role of this elusive animal. I am not the first to see the relationship between perception and learning. Bronbeck (1971) has an interesting summary article on the role of perception in physics. He uses Piaget's theory as the basis for comparison in looking at perception and its relationship to physics.

Basically the conceptual framework will be discussed in terms of figure/ground relationships and in a relative

Abstract

and absolute framework. The concept can be developed as a possible explanation of the evolution of thought, but I will save this for later discussion. There are many areas of concern here which will be addressed in various dimensions. One concerns the various levels a child deals in during the preoperational level. At what point does a child begin to perceive his world in the fourth dimension.

This paper will be an introduction to a conceptualization to develop into a possible theory on child development

Jean Piaget, a genetic epistemologist has developed a vital theory of child development which describes the evolution of thought in the child from infancy to adolescence. He has received a great deal of criticism from various research circles in psychology attacking his experimental methods. This paper will not address the validity of his experimentation nor will it try to ascertian if the criticism of his theory is justified or not. The purpose of this paper is to put his theory along with a theory espoused by Ogletree and others on Bioplasmic forces, and tie these theories together in a meagingful manner with thoee of physics and perception, a inter-relationship sought after by David Bohm. This is not a statement of theory but rather a conceptual framework being put forth to better explain Piaget's theory and Ogletree's theory as they relate to the overall theory of knowledge and its evolution. At this point, readers should be cognizant of the heuristic value of this conceptual framework rather than with its validity. The validity of the framework will only stand after a more succinct statement can be made of Piaget's and Ogletree's research through ecological based research.

Basically this conceptual framework takes two terms from the

Special Theory of Relativity (Einstein, 1905) and incoperates it into a time/space/movement continuum on how children view their world. The stages of development will be isomorphic to those of Piaget's. There will be four stages: 0-18mos; 18mos-7yrs; 7-11yrs; and 11+yrs. Within those stages, space and time will be introduced as the child sees these concepts in a figure-ground relationship. A formula will be introduced:

$$\text{Time} + \text{Space} = \text{Movement}$$

However, with this formula, a la Gestalt psychological framework, the whole is greater than the sum of its parts. The necessary adjustment is then made for the above equation:

$$\text{Time} + \text{Space} \overset{\sim}{\rightarrow} \text{Movement}$$

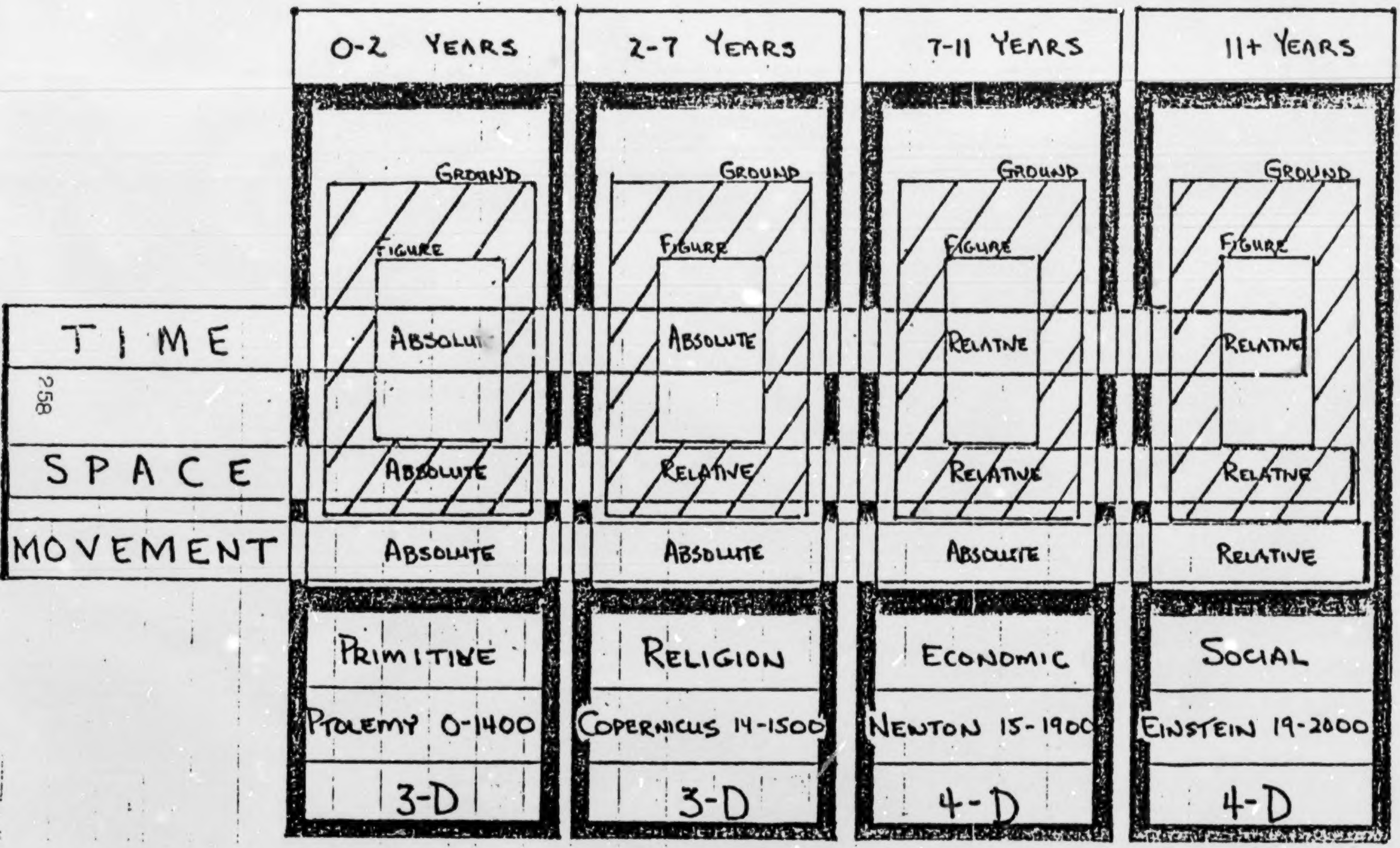
In Chart # 5 starting with the first stage of development, the infant deals with his world in absolute terms, nothing is invariant (internalized or relative). This is evident in Piaget's theory where he states (Piaget, 1932) that the child is incapable of conceptualizing or internalizing thought. He literally thinks out loud and is totally enveloped within immediate perception.

Between 18 mos-7 years, stage 2, the child internalizes (invariant, relative) the concept of space. This is critical because although this concept is internalized, time is not. The way we teach children or rather the way children learn is very different from the previous stage. He possesses object permanence, and adult permanence, has object constancy, etc. These are all space concepts. What he doesn't have, however, are the time concepts (they aren't invariant, internalized). He doesn't transfer, he doesn't have reversibiltiy. He also does not have movement concepts internalized. He is still egocentric, still doesn't conserve.

Insert Chart # 5

As he approaches stage 3, he begins to acquire time concepts and with this some movement concepts. However,in the latter category he is still influenced by immediate perception. Movement is not totally internalized. This doesn't occur until the last stage, stage 4.

It is obvious how this conceptual framework fits into Piaget's theory or rather how Piaget's theory fits into the conceptual framework. But how does Ogletree's theory fit into it. In Ogletree's theory, he is talking in terms of Energy Levels or energy differentials. He relates how in education children waste


GROUND
FIGURE
GROUND
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GROUND
FIGURE
GROUND
FIGURE

	0-2 YEARS	2-7 YEARS	7-11 YEARS	11+ YEARS
TIME	ABSOLUTE	ABSOLUTE	RELATIVE	RELATIVE
SPACE	ABSOLUTE	RELATIVE	RELATIVE	RELATIVE
MOVEMENT	ABSOLUTE	ABSOLUTE	ABSOLUTE	RELATIVE
	PRIMITIVE	RELIGION	ECONOMIC	SOCIAL
	PTOLEMY 0-1400	COPERNICUS 14-1500	NEWTON 15-1900	EINSTEIN 19-2000
	3-D	3-D	4-D	4-D

Chart # 5

energy through meaningless tasks. Within the conceptual framework, don't teach absolutes in space concepts when a child has internalized or is dealing in a relative manner with space. Behaviorists have a bad habit of doing this. They have prove conclusively that Piagetian tasks can be taught earlier than Piaget predicts, but at what expense to the child's energy levels. Are we depleting the child early? I think it is an unequivocal, "Yes"!

REFERENCES

I. Specific Evaluation on Children or Related to Children:

1. Arnote, T. Variations in the amount of indoor play space as associated with certain physical aggressive contacts of young children in group settings. Dissertation Abstracts International. November, 1970, vol. 31, no. 1369.

2. Auerbach, Aaron. The biosociative or creative act in the nursery school. Young Children. October, 1972, vol. 28 (1), p. 27.

3. Cole, Oscar J. Children's academic motivation: An investigation of the effects of self- and social-evaluations. Dissertation Abstracts International. March, 1973, vol. 33(9-B), no. 4484.

4. Cooper & Ingleby. Direct observation in the infant school classroom. Journal of Child Psychology and Psychiatry and Allied Disciplines. October, 1974, vol. 15(4), p. 263.

5. Elliot, David L. Planning, analyzing, and evaluating early childhood programs. Revisiting Early Childhood Education: Readings. Frost. N.Y.,N.Y. Holt, Rinehart and Winston, 1973.

6. Evans,Ellis D. Measurement practices in early childhood education. Preschool Education: A handbook for the training of early childhood educators. Colvin and Zaffiro. N.Y.,N.Y. Springer, 1974.

7. Fisher, M. A design for evaluating educational programs for culturally disadvantaged children. Dissertation Abstracts International. February, 1972, vol. 32 (8-A), no. 4346.

8. Gilligan, M.C. The effect of varied playground space on certain behavioral aspects of 4 and 5 year old children. Dissertation Abstracts International. November, 1970, vol. 31, no. 2003.

9. Goguen & Maillet. Evaluation of the Butouche preschool project,1972. New Brunswick NewStart. Richibucto, Canada, 1972.

10. Nelson, Singer, & Johnsen. Community considerations in the evaluation of a children's residential treatment center. *Proceedings from the 81st Annual Convention of the American Psychological Association*--Montreal Canada. 1973, vol. 8, p. 957.

11. Peters, Donald L. Dissemination. *Preschool Education: A handbook for the training of early childhood educators*. Colvin and Zaffiro. NY.,N.Y. Springer, 1974

12. Robinson H. & Robinson N. Longitudinal development of very young children in a comprehensive day care program: The first two years. *Child Development*. 1971, vol. 42(6), p. 1673-1683.

13. Ryan & Moffit. Evaluation of preschool programs. *Canadian Psychologist*. July, 1974, vol. 15(3), p. 205.

14. Sigel, Irving. Where is preschool education going: Or are we en route without a road map? *Proceedings of the International Conference on Testing Problems*.1972, p.99.

15. Smith, Flick, Ferris, & Sellmann. Prediction of developmental outcome at 7 years from prenatal, perinatal, and postnatal events. *Child Development*. June, 1972, vol. 43(2), p. 495.

16. Smith, P.K. Temporal clusters and individual differences in the behavior of preschool children. *Comparative Ecology and Behavior of Primates*. Michael & Crook. Academic Press,Inc., London. 1973. p. 751.

17. Wasik & Wasik. Use of the WPPSI and the WISC with culturally deprived children. *Measurement and Evaluation*. April, 1972, vol. 5(1). p. 280.

18. Williams, Best, & Boswell. The measurement of children's racial attitudes in the early school years. *Child Development*. June, 1975, vol. 46(2), p. 494.

19. Williams, Boswell, & Best. Evaluative responses of preschool children to the colors white and black. *Child Development*. June, 1975, vol. 46(2), p. 501.

20. Williams & Rosseau. Evaluation and identification responses of Negro preschoolers to the colors black and white. Perceptual and Motor Skills. October, 1971, vol. 33(2), p. 587.

21. Yoshino, K. An evaluation of regular preschool education for hearing handicapped children. Japanese Journal of Special Education. March, 1974, vol. 11(3), p. 43.

22. Young, Bently, & Washington. Pitfalls of assessing young children: An overview. Journal of Non-white Concerns in Personnel and Guidance. October, 1973, vol. 2(1), p.21.

II. General Evaluation Studies:

1. Caro, Francis G. Readings in Evaluation Research. Russell Sage Foundation, 1971, N.Y.,N.Y.

2. Davidson, Clark, & Hamerlynck. Evaluation of behavioral programs in community, residential, and school settings. The Fifth Banff International Conference on Behavioral Modification.--Champaign, Illinois. Research Press, 1974.

3. Esposito. Homogeneous and heterogeneous ability grouping: Findings and implications for evaluating and designing more effective educational environments. Review of Educational Research. Spring 1975, vol. 43(2), p. 163.

4. Gordon, Malcolm A. Logical performance in information evaluation. Dissertation Abstracts International. March, 1972, vol. 32(9-B), p. 5477.

5. Gruen & Ball. Let's evaluate evaluation. School Counselor. January, 1974, vol.21(3), p. 228.

6. Johnson, Thomas. A macro view of process evaluation. Viewpoints. July, 1972, vol. 48(4), p. 79.

7. Larkin, E.J. Three models of evaluation. Canadian Psychologist. January, 1974, vol. 15(1), p. 89.

8. Lauber, Josef. Program for a statistical evaluation of sociological data. Sociologicky Casopis. 1969, vol. 5(3), p. 335.

9. Mackler, Bernard. Two kinds of research on evaluation. *Psychological Reports*. February, 1974, vol. 34(1), p. 289.

10. Maehr & Stallings. Freedom from external evaluation. *Child Development*. March, 1972, vol. 43(1), p. 177.

11. Moursund, Janet P. *Evaluation: An introduction to Research Design*. Monterey, Calif. Brooks/Cole Pub. Co., 1973.

12. Sanders & Cunningham. A structure for formative evaluation in product development. *Review of Educational Research*. Spring, 1973, vol. 43(2), p. 217.

13. Thompson & Rath. The administrative experiment: A special case of field testing of evaluation. *Human Factors*. June, 1974, vol. 16(3), p. 238.

14. Webster & Eichelberger. A use of the regression model in educational evaluation. *Journal of Experimental Education*. Spring, 1972, vol.40(3), p. 91.

15. Weiss, Carol. Where politics and evaluation research meet. *Evaluation*. 1973, vol.1(3), p. 37.

16. Wortman, Paul M. Evaluation research: A psychological perspective. *American Psychologist*. May, 1975, vol.30(5), p. 562.

III. Back-up Studies:

1. Baumrind, Diana. Will a day care center be a child development center? *Journal of Young Children*. vol. XXVIII, no.3, February, 1973, p. 172-184.

2. Brown, Roger. *Words and Things*. The Free Press, Glencoe, Ill., 1958, p. 22-53.

3. Caldwell, B.M. What does research teach us about day care? *Journal of Children Today*. January-February, 1972, p. 6-11.

4. Cazden, C.B. Suggestions from studies of early acquisition. *Childhood Education*. December, 1969, vol. 46(3), p. 117-131.

5. Cazden, C.B. Evaluating language learning in early childhood education. *Formative Evaluation of Student Learning* B.S. Bloom, T. Hastings, and G. Madaus(Eds.) N.Y. McGraw-Hill (in press).

6. Chandler, Caroline. *Early Child Care*. Atherton Press, N.Y., 1968, p. 68-105.

7. Evans, Ellis D. *Contemporary Influences in Early Childhood Education*. Holt, Rinehart, and Winston, 1971, p. 103-139.

8. Ervin, S.M. Imitation and structural changes in children's language. *New Directions in the Study of Language*. E.H. Lenneberg (ED.) Cambridge, M.I.T. Press, 1964, p. 163-190.

9. Fein, Greta & Stewart, Clarke A. *Day Care in Context*. John Wiley & sons, N.Y., 1973, p. 73-97.

10. Fiene, Richard J. Movement and time spent in verbalizations in family and gr up day care centers. *Research Relating to Children*. September-February, 1973-74, Bulletin 34.

11. Fiene, Richard J. Time spent in N-V versus N-V-A sentence structures in family and group day care centers. *Research Relating to Children*. September-February, 1973-74. Bulletin 34.

12. Gleason, J.B. Do Children Imitate? *Proceedings of the International Conference on Oral Education of the Deaf*. June 17-24, 1967, vol. 2, p. 1441-1448.

13. Goodman, K.S. On valuing diversity in language. *Childhood Education*. December 1969, vol. 46(3), p. 123-126

14. Gordon, Ira J. Success and Accountability. *Childhood Education*. April 1969, vol. 43(7), p. 338-343.

15. Grothberg, E.H. *Day Care: Resources for Decisions*. Office of Econom ic Opportunity, p. 90-108.

16. Hayes, William. *Statistics for Psychologists*. Holt, Rinehart, & Winston, N.Y., 1963, p. 320-322.

17. Hess, R.D. & Croft, D.J. *Teachers of Young Children*. Houghtin Mifflin Co. N.Y., 1972, p. 172-184.

18. Hess, R.D. *Early Education*. Aldine Pub. Co., Chicago, 1966, p. 131-142.

19. Hirsch, E.S. What are good responsive environments for young children. *Journal of Young Children*. vol. 28 (2), December, 1972, p. 75-80.

20. Hoffman, Martin L. *Child Development Research*. Russell Sage Foundation, N.Y., 1966,p. 55-106.

21. Irvin, O.C. Infant speech: The effect of family occupational status and of age on use of sound types. *Journal of Speech Disorders*. 13, 1948, p. 320-323.

22. Isaacs, Susan. *Intellectual Growth in Young Children*.Schoken Books, N.Y., 1966, p. 57-97.

23. Karnes, M.S. & Hodgins, A.S. *Research and Development Program on Preschool Disadvantaged Children*. vol. 1, Project no. 5-1181. Contact no. OE 6-10-235. May, 1969. United States Department of Health, Education, and Welfare, Office of Education, Bureau of Research.

24. Keister, M.E. & Saunders S. Family day care: Some Observations. 1972, University of North Carolina, Greensboro. unpublished manuscript.

25. Keister, M.E. *"The Good Life"for Infants and Toddlers*. Washington, D.C., National Association for the Education of Young Children, 1

26. Leeper, S.H. *Good Schools for Young Children*. MacMillian Co., London, 1971, p. 45-52.

27. LeLaurin, K. & Risley, T. The organization of day care environments: Zone versus man to man staff assignments. Fall, 1972. *Journal of the Applied Analysis of Behavior*. vol. 5(3), p. 225-232.

28. Levenstein, P. *Verbal interaction project manual*. 1970. Freeport, N.Y.

29. Matthews, G.H. Analysis by synthesis of sentences of natural languages. *National Physics Laboratory Symposium:* London no. 13, 1961, p. 531-543.

30. McCarthy, D. *Language Development of the Pre-School Child*. Minneapolis, University of Minnesota Press, 1930.

31. McNeill, D. *The Acquisition of Language*. Harper & Row Pub., N.Y. 1970, p. 15-37.

32. Menyuk, Paula. *Sentences Children Use*. The M.I.T. Press, Cambridge, Mass., 1969, p. 25-58.

33. Myers, Jerome L. *Fundamentals of Experimental Design*. Allyn & Bacon, Boston, Mass., 1972, p. 330-350.

34. Palermo, D.S. & Lipsitt, L. *Research Readings in Child Psychology*. Holt, Rinehart, & Winston, Inc. N.Y., p. 336-335.

35. Palmer, F.H. Minimal intervention at age two and three and subsequent intellective changes. *Conceptualizations in Preschool Curricula*. R.H. Parker (ed.) Boston, Mass., Allyn & Bacon, pub.

36. Parker, R.H. *The Preschool in Action*. Allyn & Bacon, pub., Boston, Mass., 1972,p. 456-506.

37. Pauposek, H. Effects of group rearing conditions during the preschool years of life. Paper to read at AAAS meeting in Boston, 1969.

38. Pigge, F.L. A comparison of yielding to influence in open and traditional classrooms. *Childhood Education*. October, 1972, vol. 49(1), p. 39-44.

39. Prescott, E. & Jones, E. Day care as a child-rearing environment. National Association for the Education of Young Children . Washington, D.C., 1972, p. 21-24, 42-44.vol2.

40. Rosenberg, P.S. Phrase structure principles of English complex sentence formation. *Journal of Linguistics*. vol.3., 1967, p. 103-111.

41. Sale, J.S. Family day care--A valuable alternative. Journal of Young Children. vol. 28(4), April, 1973, p. 209-216.

42. Swenson, J.P. Alternatives in Quality Care. Day Care and Child Development Council of America, 1972, p. 27-54.

43. Vygotsky, L.A. Thought and Language. M.I.T. Press, Cambridge, M ass., 1962.

44. Weikart, David P. Cognitively Oriented Model. Teachers of Young Children. Hess & Croft. Houghtin Mifflin, Co., N.Y., 1972, p. 172-184.

45. Zigler, Edward . The environmental mystique. Childhood Education. May, 1970, vol.46(8), p. 403-412.